ENCYCLOPAEDIC DICTIONARY OF ECONOMICS

(Volume Three)

N.B. GHODKE

MITTAL PUBLICATIONS
DELHI-110035 (INDIA)

First Published in 1985

Published by
K. M. Mittal
Mittal Publications
B-2/19-B, Lawrence Road
DELHI-110035 (India)

Distributed by
Mittal Publishers' Distributors
1856, Trinagar,
DELHI-110035

Printed by
Mahajan Enterprises 18A/1, Veer Nagar
West Sagarpur, New Delhi-110046

CONTENTS

PREFACE

"Economics seems to apply to every nook and cranny of human experience". (*Robert A. Mundell*). "Some study of economics is at once a practical necessity and a moral obligation, for economic questions touch the daily lives of all". (*Henry Clay*). Thus, *Encyclopaedic Dictionary of Economics* which is the first of its kind in the entire literature of economics, has been prepared so as to be useful not only to under-graduate and post-graduate students of economics, teachers of economics, research scholars and economic writers, but also to economic administrators, policy makers, businessmen, statesmen and the enlightened public whose opinions influence the formulation of national and international economic policies.

The *Dictionary* covers every important economic pronouncements said from the pre-Aristotlean days to the present (1984 Economics Nobel Prize winner Dr. Richard Stone). In other words it encompasses all the Schools of economic thought *viz.*, ancient economic thought, mercantilism, physiocracy, classical school. neo-classical school, modern school and neo-modern school. The *Dictionary* for the first time also covers ancient, medieval and modern *Indian* economic thought, and economy.

"Economics is an unfinished science". (*F. Zuethen*). It is growing at a staggering rate both vertically and horizontally. The present work, accordingly, covers with its 3258 entries, the following branches of economics :

(1) History of economic thought, (2) Theory of value, (3) Monetary economics, (4) Public finance, (5) International economics, (6) Business cycles, (7) Mathematical economics, (8) Statistics, (9) Econometrics, (10) Welfare economics, (11) Economic history, (12) Agricultural economics, (13) Industrial economics, (14) Managerial economics, (15) Economics of development, (16) Economics of planning, (17) Economics of transport, (18) Economics of education, (19) Keynesian economics, (20) Marxian economics, (21) Rural economics, (22) Economics of war, (23) Economics of co-operation, (24) Research methodology, (25) Economic sociology, (26) Economic geography, (27) Economic botany, (28) Commerce, (29) Economics of love, and (30) Economics of labour.

The Dictionary includes definitions of economic terms, statements of economic laws, theories and principles with historical notes wherever necessary, descriptions of economic and financial institutions and organizations, biographical sketches of eminent economists—dead and living, foreign and Indian—with a greater accent on their important contributions

to the science of economics and finally summaries of the reports of important economic committees and commissions. I have also added an appendix containing some interesting and useful economic quotations.

"The beginner (of economics) must be warned that he will have to master a technical vocabulary. Instead of coining new words however or using Latin and Greek terms as many of other sciences do, economics has created its own vocabulary by taking words in ordinary everyday use assigning special meanings to them. Unless a student is careful, this will be a source of confusion," (*A.L. Meyers*). Accordingly this *Dictionary* will enable the beginners to acquire exact technical meaning of the economic terms.

Then there is another and very serious problem which is peculiar to economics: "More unfortunate from the students' point of view is the fact that not all economists always mean exactly the same thing when they use the same term", (*A.L. Meyers*). "In Economics the same word (concept) is variously defined. We do not have the principle of linguistic monogamy—one meaning wedded to one word. We (thus) find in Economics linguistic polygamy or Hollywood marriage". (*Kenneth E. Boulding*). Further, of all the social sciences, economics is the most controversial. In this connection F. Y. Edgeworth remarks, "We hold that for the mastery of a speculative and controversial science (which economics is) a certain multiplication of authorities is desirable. It is a false tendency on the part of the teachers to inculcate and the pupils to learn by rote the very phrases and metaphors of a favourite author". In view of the aforesaid difficulty and in order to get over it, the views of different economists on the same concepts are put together. The cross-study of different authors should present a complete and correct idea.

The question of claiming originality does not arise at all, because A.N. Whitehead has already settled the issue for good when he said: "Everything of importance has been said before by somebody who did not discover it".

G.L.S. Shackle in his *Economics for Pleasure* observes: "Hatred, ridicule and contempt......are the lot of economist, for he is the exponent of dismal science". However, while presenting the life sketches of economists, I have eschewed the above 'lot of economist' and have tried to concentrate on the positive contribution of these economists without myself being either idolatrous or hyper-critical.

Against each entry in the bracket I have mentioned the context, that is the branch of economics, in which the entry is used, so as to avoid the possible confusion in the mind of the reader.

I have spent over 20 years since I joined Yeshwant Mahavidyalaya Nanded (Maharashtra) as lecturer in economics in 1963, in reading hundreds of economic books and journals, collecting material, processing and co-ordinating it and producing it in the present form. I earnestly hope

in the hands of the readers. I alone am responsible for any shortcomings or inaccuracies in the book and the suggestions for correction or improvement will be gratefully accepted.

I express my thanks to my first Principal G.R. Mhaisekar (later the Rajya Sabha Member) and my students for having induced me to compile this *Dictionary*. My thanks are also due to my colleagues J.P. Karva and P.G. Nayak for having assisted me in preparing the book and Mr. N.S. Kotur and P. Goudellar for having typed the manuscript.

I very humbly acknowledge my deep indebtedness to all the authors and their esteemed publishers for my having consulted their books in preparing the present *Dictionary*.

Lastly I would be failing in my duty if I do not express my thanks to my wife and children for their 'waiting' and 'abstinence'.

Dharwar N.B. GHODKE

LIST OF THE AUTHORS QUOTED

1. *Abbey Dictionary*
2. H.C. Adams
3. Adapted
4. A.N. Agrawal
5. H.L. Ahuja
6. Alexander
7. Allen, Buchanan and Colberg
8. R.G.D. Allen
9. *American Home Economics Association*
10. J. Amuzegar
11. Andley and Sundharam
12. Aristotle
13. *Austrian School of Economics*
14. George L. Bach
15. Walter Bagehot
16. Joe S. Bain
17. Balfour
18. C.S. Barla and H.S. Agarwal
19. Bastable
20. A.K Basu
21. J.R. Batliboi
22. P.T. Bauer
23. P.T. Bauer and B.S. Yamey
24. William J. Baumol
25. A. Beacham
26. R.D. Bedi
27. J.F. Bell
28. P.W. Bell and M.P. Todaro
29. Frederic Benham
30. E.M. Bernstein
31. Charles Bettelheim
32. William Beveridge
33. A.B. Bhattacharya
34. *Bill of Exchange Act, 1882*
35. Mark Blaug
36. Gordon F. Bloom
37. M.B. Bober
38. J. Bocke
39. Boddington
40. Bonhe
41. Kenneth E. Boulding
42. Bowley and Stamp
43. A.L. Bowley
44. M. Bowley
45. P.R. Brahmananda
46. Briggs and Jordan
47. *British Institute of Personnel Management*
48. *British Labour Ministry*
49. B.C. Brookes and W.F.L. Dick
50. F.S. Brooman
51. Buchanan Colberg
52. Buckle
53. *Bullion Report*, 1910
54. *Businessmen's View*
55. Raymond Bye
56. A.K. Cairncross
57. H. Calvert
58. Edwin Cannan
59. Carr Saunders
60. T.N. Carver
61. Gustav Cassel
62. J.M. Cassels
63. R.E. Chaddock
64. Edward H. Chamberlin
65. *Chamber's Twentieth Century Dictionary*
66. Mahesh Chand
67. Lester V. Chandler
68. Pei-Kang Chang
69. Chapman
70. Raja J. Chelliah
71. Michael Chisolm
72. P.N. Chopra
73. Alessandro Cigno

74. Clay
75. Colin Clark
76. Colin Clark and Margaret Haswell
77. J.M. Clark
78. R. Cohen
79. Edwin Coke
80. G.D.H. Cole
81. *Common View*
82. *Companies Act, 1936*
83. *Compiler*
84. Luigi Cossa
85. *Cottage Industries Sub-committee, India*
86. J.H.R. Cromwell and E.H. Czerwonky
87. Geoffrey Crowther
88. Norman Crump
89. W.A. Coulborn
90. A. Cournot
91. Dominick T. Coyle
92. William Cunningham
93. *Cynical definition*
94. Hugh Dalton

95. Clarence Danhop
96. M.L. Darling
97. A.B. Dass and M.N. Chatterji
98. A.K. Dasgupta
99. Sohrab R. Davar
100. Herbert J. Davenport
101. A.C.L. Day
102. M.H. dekock
103. C.D. Deshmukh
104. K.K. Dewett
105. Dewett, Singh and Varma
106. H.D. Dickinson
107. *Dictionary Meaning*
108. Dudley Dillard
109. Maurice Dobb
110. Robert Dorfman
111. E.F.M. Durbin
112. John Due

113. *The Economic Times*
114. E.Y. Edgeworth
115. Edison
116. Paul Einzig
117. D.L. Elhance
118. Howard S. Ellis
119. P.T. Ellsworth
120. Richard T. Ely
121. *Encyclopaedia Britannica*
122. *Encyclopaedia of Economics*
123. *Encyclopaedia of Social Sciences*
124. Frederic Engels
125. Escher
126. James A. Estey
127. *Everyman's Encyclopaedia*

128. Fairchild
129. Fairchild, Buck and Slesinger
130. C.R. Fay
131. W.J. Fellner
132. Robert Ferber and P.J. Verdoon
133. Fetter
134. *Finance and Development—Fund and Bank Review*
135. *First Five Year Plan* (India)
136. *Fiscal Commission Report* (1949-50) *and Working Party on Industries and Trade—ECAFE*, Irving Fisher
137. Miles Fleming
138. P. Sargent Florence
139. G.W. Forster and M.L. Leager
140. L.M. Fraser
141. *French Authority*
142. Ragnar Frisch

143. General Definition
144. Rosen George
145. Alak Ghosh
146. B.N. Ghosh
147. Charles Gide and Charles Rist
148. R.T. Gill
149. V.V. Giri
150. H.H. Gossen

151. *Government of India*
152. Henry Grayson
153. J. Gruntzel
154. R.D. Gupta
155. J.G. Gurley and E.S. Shaw

156. Gottfried Von Haberler
157. Arthur T. Hadley
158. W.W. Haines
159. R.L. Hall
160. George N. Halm
161. Earl Humilton
162. Lewis H. Haney
163. Alvin H. Hansen
164. J.L. Hanson
165. R.F. Harrod
166. J. Harvey
167. S.F. Hasan
168. R.M. Havens, J.S. Henderson and D.C. Crammer
169. Ralph G. Hawtrey
170. F. Hayashi
171. F.A. Von Hayek
172. R.L. Heilbroner
173. Heilperin
174. Karl Helfferich
175. L. Herber and L. Hart
176. Hermann
177. M.T. Herrick
178. J.R. Hicks
179. Ursula K. Hicks
180. Benjamin Higgins
181. Justice Higgins
182. Albert Hirschman
183. J.A. Hobson
184. Harold Hotelling
185. Chiang Hsien
186. Hsu
187. Huntington
188. *India*
189. *Indian Companies Act*
190. *Indian Council of Agricultural Research (ICAR)*
191. *Indian Express*
192. *Indian Partnership Act*, 1932
193. *Indian Taxation Enquiry Commission*
194. *Industrial Finance Corporation Act, India*
195. *International Encyclopaedia of Social Sciences*
196. *International Labour Organisation*
197. L.C. Jain
198. P.C. Jain
199. *James and James Mathematics Dictionary*
200. Jathar and Beri
201. W.S. John Jevons
202. John Jewkes
203. M.L. Jhingan
204. Jones
205. M J. Jucius

206. A.E. Kahn
207. M. Kalecki
208. K.N. Katju
209. Karl Kautsky
210. R.P. Kent
211. John Maynard Keynes
212. John Neville Keynes
213. E.M. Kemmerer
214. T.W. Kent
215. O.P. Khanna
216. D. Kinley
217. Braj Kishor and B.P. Singh
218. Laurence R. Klein
219. Klim,Starkey and Hall
220. G.F. Knapp
221. S. Korteweg and E.A.G. Keesing
222. Raj Krishna
223. V.T. Krishnamachari
224. K.L. Kool
225. S.C. Kuchhal
226. Kenneth Kurihara
227. Simon Kuznets

228. *Labour Department, Government of India*

229. D.T. Lakdawala
230. B.B. Lal
231. Sanjay Lall
232. Carl Landauer
233. Oscar Lange
234. Waltair Leaf
235. *League of Nations*
236. *League of Nations Committee*
237. *Legal definition*
238. Robert Lekachman
239. Wassily Leontief
240. Abba P. Lerner
241. Jean Lescure
242. Richard A. Lester
243. Levasseur
244. Herman Levy
245. Arthur Lewis
246. Richard G. Lipsey
247. I.M.D. Little
248. Lewish Lorwin
249. Loucks and Weldon Hoots
250. Lovitt
251. J.L. Lundy

252. Macfie
253. Fritz Machlup
254. *Macmillan Committee*
255. D. Macwright
256. *Madras State Aid to Industry Act, 1947*
257. Lord Mahon
258. Tapas Majumdar
259. T.R. Malthus
260. C.B. Mamoria
261. Alfred Marshall
262. Karl Marx
263. Rajnarain Mathur
264. McConnel
265. Mcculloch
266. M.P. McNair and R.S. Meriam
267. M.A.G. Van Meerhaeghe
268. J.K. Mehta
269. V.L. Mehta
270. G.M. Meier and R.E. Baldwin
271. Votto Von Merring
272. Albert L. Meyers
273. John Stuart Mill
274. Ludwig Von Mises
275. Wesley C. Mitchell
276. J.K. Mitra
277. *Modern Reference Encyclopaedia*
278. G.S. Monga
279. W. Morris
280. S. Mukhopadhyay and D. Datta
281. Anatol Murad
282. Murray· Havens, Henderson and Cammer
283. Richard, A. Musgrave
284. Hla Mynt

285. S. Nanjundan, A.E. Robinson and E. Staley
286. D.M. Nanjundappa
287. Claudio Napoleoni
288. Shanti Narayan
289. *National Board for Economy and Efficiency*
290. *National Council of Applied Economic Research (N.C.A.E.R.)*
291. *National Planning Committee of India*
292. *Negotiable Instruments Act, 1881, India*
293. E.T. Nevin
294. Newcomb
295. P.C. Newman
296. W.S. Nicholls
297. J.S. Nicholson
298. *Nuffield College Statement*
299. Rangar Nurkse
300. Nussbaum

301. Bertil Ohlin
302. Roger Orsinger

303. B.N. Pal
304. *Palgrave's Dictionary of Political Economy*
305. V.R. Panchamukhi
306. Vilfredo Pareto

307. *Parliament of England*
308. Don Patinkin
309. J. Pentmann
310. Person
311. Florence Peterson
312. William Petty
313. Arthur C. Pigou
314. E.H. Plank
315. *Planning Commission of India*
316. Plehn
317. K.N. Prasad
318. P.H. Prasad
319. A.R. Prest
320. K. Pultaswamaiah

321. *Quoted*
322. F. Quesnay

323. Rajkrishna
324. K.T. Ramkrishna
325. Melvin W. Reder
326. *Refinance Corporation of India*
327. *Reserve Bank of India*
328. David Ricardo
329. Lionel C. Robbins
330. Dennis H. Robertson
331. Joan Robinson
332. Eric Roll
333. W. Roscher
334. Sam Rosen
335. W. Roscher
336. P.N. Rosenstein-Rodan
337. W. Roscher
338. *Royal Commission of England*
339. I.M. Rubinow

340. T.N. Sachdev
341. Paul A. Samuelson
342. J. Sanmarti J.S.
343. K. Sanyasiah and A.V. Ranganadhachary
344. A.K. Saran and U.B. Singh
345. S.R. Saxena
346. J.B. Say
347. R.S. Sayers
348. W.M. Scammel
349. C.L. Schultze
350. Joseph A. Schumpeter
351. Tibor Scitovsky
352. Seager
353. *Second Five Year Plan*
354. *Securities Contracts (Regulations) Act*, 1956
355. H. Secrist
356. A. Seldon and E.G. Pennance
357. *Select Committee of Home of Lords*
358. E.R.A. Seligman
359. Sen and Mitra
360. Nassau W. Senior
361. M.L. Seth
362. G.L.S. Shackle
363. S. Shankaran
364. B.F. Shields
365. F. Shirras
366. P.D. Shrimali
367. T.S. Simey
368. Hans Singer
369. Bright Singh
370. H.K. Manmohan Singh
371. V.B. Singh
372. Adam Smith
373. Vera Smith
374. Warren Smith
375. Arthur Smithies
376. Andrew Snowfield
377. Bo Soderstein
378. George Soul
379. *South Australian Industrial Code of 1920*
380. Thomas Spates
381. M.H. Spencer and L. Siegelman
382. Joseph J. Spengler
383. Arthur Spiethoff
384. O.W.M. Sprague
385. Srivastav, Nigam, Sahai and Banerjee
386. H.G.P. Srivastava
387. S.K. Srivastava

388. Eugene Staley
389. Joseph Stalin
390. Josiah Stamp
391. *Statute of the Bank for International Settlement*
392. George J. Stigler
393. A.W. Stonier and D.C. Hague
394. Paul Studentsky
395. *(A) U.N. Study*
396. P.V. Sukhatme
397. K.P.M. Sundharam
398. K.P.M. Sundharam and M.C. Vaish

399. B.C. Tandon
400. F.W. Taussig
401. *Taxation Enquiry Commission of India*
402. P.A.S. Tayler
403. Philip E. Taylor
404. Max M. Tharp
405. Evelyn Thomas
406. Rollin G. Thomas
407. S.E. Thomas
408. Jan Tinbergen
409. R.N. Tiwari

410. *United Nations Organisation (UNO)*
411. *U.N. Department of Economic and Social Affairs*
412. *U.N. Sub-Committee's Report*
413. *U.S. Census of Agriculture*
414. *U.S. Department of Commerce*

415. C.N. Vakil
416. R.L. Varshney and K.L. Maheshwari
417. M.C. Vaish
418. M.C. Vaish and K.P.M. Sundharam
419. S. Venu
420. Jacob Viner

421. Adolf Wagner
422. F.A. Walker
423. Max. J. Wasserman and C.W. Hultman
424. G.S. Watkins and P.A. Dodd
425. Albert Waterson
426. Donald S. Watson
427. A.E. Waugh
428. Sydney and Beatrice Webb
429. Max Weber
430. Webstor
431. Weston and Crew
432. Whittlesey Freedman and Herman
433. Knut Wicksell
434. Philip H. Wicksteed
435. Friedrich Von Wieser
436. Oscar Wilde
437. H.F. Williamson
438. H.F. Williamson and J.A. Buttrick
439. Hartley Withers
440. Barbara Wootton
441. P.G. Wright

442. Dale Yoder
443. *Yojana*
444. Arthur Young

445. F. Zweig

GADGIL, DHANANJAY RAMCHANDRA (1901-1971) (*History of economic thought)

An outstanding Indian economist, educationist and co-operator. He was also a stormy social crusader.

Professor Gadgil, M.A., M. Litt. (Cantab.), D. Litt. was educated at Pathwardan High School, Nagpur and Queen's College, Cambridge.

From 1930 to September 1, 1967, when he was appointed the Deputy Chairman of the Indian National Planning Commission he was the Founder Director of the famous Gokhale Institute of Politics and Economics, Poona.

Dr. Gadgil a brilliant and sharp thinker held several important posts and positions. They include:

(i) Additional Assistant Secretary, Finance Department, Bombay (1924-25);
(ii) Principal, M.T.B. College, Surat (1925-30);
(iii) Member, Bombay Textile Labour Enquiry Committee (1937-40),
(iv) President, Indian Economic Association (1940);
(v) Chairman, Agricultural Finance Sub-Committee, Government of India (1944-45);
(vi) Member, Commodities Prices Board (1947);
(vii) Member, National Income Committee (1950-52);
(viii) Member, U.N. Group on Development of under-developed Countries (1951);
(ix) Member, Committee of Direction, All India Rural Credit Survey (1951-54);
(x) President, Agricultural Economic Conference (1954);
(xi) Chairman, Programme Committee, International Institute of Pacific Relations (1950-54);
(xii) Chairman, *Mumbai Rajya Sahakari Sakhar Karkhana Sangh*; Bombay State;
(xiii) Chairman, Federation of Co-operative Sugar Factories (1956-59);
(xiv) Chairman, Maharashtra State, Co-operative Bank Limited;
(xv) Member, Central Board of Directors, State Bank of India;
(xvi) Member, Board of Directors, Agricultural Refinance Corporation of India;
(xvii) President, National Federation of Sugar Co-operative Factories;
(xviii) President, National Co-operative Union of India;
(xix) Member, Board of Trade;
(xx) Member, National Co-operative Development Corporation;
(xxi) Member, Advisory Committee, International Institute of Labour Studies;

(xxii) Vice-Chairman, Economists' Panel, Planning Commission;
(xxiii) Member, Research Programme Committee, Planning Commission;
(xxiv) Member of the Rajya Sabha.
(xxv) Vice-Chancellor, University of Poona.

He wrote over 24 books and numerous articles and papers. Some of his important publications are:

(i) *The Industrial Evolution of India in Recent Times* (1924).
(ii) *Salaries of Public Officials in India* (1931)
(iii) *Imperial Preference for India* (1932)
(iv) *Regulation of Wages and Other Problems of Industrial Labour in India* (1943)
(v) *War and Indian Economic Policy* (1943) (with N.V. Sovani)
(vi) *Federating India* (1945)
(vii) *Poona: A Socio-Economic Survey* (1945) (He guided it)
(viii) *The Federal Problem in India* (1947)
(ix) *Economic Policy and Development* (1955).

His most well-known work is *The Industrial Evolution of India in Recent Times* which he first submitted as a thesis for the degree of Master of Letters of the Cambridge University. In this work which originally covered the period, 1850-1914, Dr. Gadgil made a critical survey of the growth and impediments of Indian industry.

Gadgil, a staunch supporter of Industrial workers, advocated higher wages and introduction of industrial welfare programmes by the Government. He was of the opinion that rationalisation should not be carried too far.

Prof. Gadgil mastered at once the fields of agriculture, industry, labour, co-operation, finance, planning and development.

Though educated at the Cambridge University, Professor Gadgil was free from the influence of western economic thinking. Realising early that purely theoretical conclusions based on the assumptions of free and perfectly competitive market economy are entirely irrelevant to the conditions of a backward and agricultural country like India, he brought to bear what may be called historical, institutional and empirical approach to economic study and thinking.

Dr. Gadgil was not an ivory tower cushion chair economist; as the Director of renowned Gokhale Institute of Economics and Politics, he moved from village to village surveying and investigating the local socio-economic problems. His studies of urban life in cities like Pune and Kolhapur as well as his study of economic consequences of irrigation are of a pioneering nature.

Professor Gadgil repudiated the assumption of free perfect

competitive economy and pointed out how the assumptions of complete mobility were totally false how a wage decided by the so-called free competition could only result in exploitation and, therefore, how the "fair wage" could only be the result of regulation and not on competitive bidding between parties with different bargain capacities. He rejected the operation of "Natural Economic Forces" and believed in a regulated economy. Dr. Gadgil propounded that inflation could be kept under control only through rationing. He held that a public distribution system and public procurement programme alone could provide stability in a developing economy. One of his achievements as Deputy Chairman of the Planning Commission was the allocation of substantive funds for the procurement operations.

Professor Gadgil maintained that what was required in under-developed countries were not marginal changes brought about by the market forces but structural changes brought about by the organised activity of the state. He believed in planning, decentralised activity, local democracy-political embodied in Panchyat Raj and economic through co-operative institutions of which he was a great champion. "Co-operative socialism" is perhaps his greatest contribution to economic thinking in India. He advocated what he called "co-operative commonwealth". He thought that co-operation was "a shield of the weak and not a sword of the rich". In the co-operative field Gadgil's greatest contribution was the concept and programme of sugar factories. He was the founder of the first co-operative sugar factory in Maharashtra.

"Economic man" is a myth according to Gadgil. Mass education, he averred, was the panacea for rural reconstruction.

Dr. Gadgil, a socialist by temperament and conviction was asked to head the Planning Commission which was reconstituted on September 5, 1967. He redrafted the Fourth Plan (1969-74) document prepared by his predecessor, Asoka Mehta. In 1971, he was to abruptly resign as the Deputy Chairman. Within a few days of his relinquishment, professor Gadgil, a stormy petrel in economic-socio-political arena, died of heart attack in the morning of May 3, 1971, in the train on his way from New Delhi to Bombay.

Compiler

GAINFULLY EMPLOYED (*Economics of labour)

To the extent that work is done for pay or consists of the making of items for sale, the person is considered to be gainfully employed.

Richard A. Lester

GALBRAITH, JOHN KENNETH (B. 1908) (*History of economic thought)

Canadian-born Harvard economist of international eminence.

Six-feet eight inches tall Galbraith was born of William Archibald and Catherine (Kendall) in Ontario on October 15, 1908. After receiving

B.S. degree in 1931 from University of Toronto, he earned his M.S. degree in 1933 and Ph.D. degree in 1934 from University of California, Berkely. From 1934 to 1939 he taught as an instructor and tutor at Harvard University. In 1939 he was appointed Assistant Professor of Economics at Princeton University. In 1949 he became Professor of Economics in Harvard University, U.S.A.

He has held numerous important positions such as Economic Adviser and Assistant to Chester Davis, Deputy Administrator of the Office of Price Administration, Director of the U.S. Strategic Bombing Survey, Director of the State Departments, Office of Economic Security Policy etc. From 1943 to 1948 he served as a member on the Board of Editors of *Fortune* magazine. In 1961 he was appointed by the late President John F. Kennedy as U.S. Ambassodor to India.

Galbraith an economic iconoclast and a replica of Thornstein Veblen, has written several books and articles. His major publications include:

1. *Modern Competition and Business Policy* (1938)
2. *The Economic Effects of the Federal Public Works Expenditures*
3. *The Theory of Price Control* (1952)
4. *American Capitalism; The Concept of Countervailing Power* (1952)
5. *The Great Crash-1929* (1955)
6. *The Affluent Society* (1958)
7. *Economic Development in Perspective* (1963)
8. *The Economic Discipline* (1967)
9. *The New Industrial State* (1967)
10. *Economics, Peace and Laughter*
11. *Indian Painting*
12. *The Triumph*
13. *Economics and the Public Purpose.*

Prof. Galbraith, a vitriolic critic of advanced societies has criticised the developed countries of producing waste and trivia. Arguing for better educational facilities and hospitals rather than an endless proliferation of luxury items which can be sold only through a barrage of costly advertising, he observed "the greater the wealth, the thicker will be the dirt." He is surprised to find that the economists have stressed increased production, but none has evolved a practical theory of consumption. In his *American Capitalism* he developed the famous doctrine of countervailing power. He refutes the doctrine of Consumer's Sovereignty. He contends that "a purely agricultural country is likely to be unprogressive even in its agriculture".

Attacking neo-classicism, Prof. Galbraith observed that "neo-classical economics does not come to grips with practical problems with which society, including the modern state, is faced. We simply cannot have an economic theory that is not functional. He divides the economy into a market system and a planning system.

When he was described once as controversial, Galbraith retorted, "I am not cotroversial. I simply tell the truth and then other people become controversial". Further, when asked about the prospects of success of his sweeping reforms in economic theory and social order he replied, "very few people of J.M. Keynes' generation accepted Keynes. It was the next generation that came along and thought his ideas were interesting. I have very little hope of pursuading the people of my generation".

Professor Samuelson remarked. "Non-economists take Galbraith too seriously, but that we in the profession do not take him seriouly enough." Galbraith has observed, "Now goods are abundant, more die in the United States of too much food than of too little. . . . It is only in the backward countries of the world that increased production is still an important object; in those most advanced what is economically needed is better distribution."

Professor Galbraith's phrases *viz.*, "the technostructure", "the educational and scientific estate" and "revised sequence" have found permanent place in economics.

The American Economic Association honoured him by electing as its president; but the Swedish Royal Academy of Sciences is yet to honour him.

Compiler

GALLOPING INFLATION (*Monetary economics)

Slow price increases are one thing. But when each increase in prices becomes the signal for an increase in wages and costs, which again sends prices up still further, we may be in the midst of a malignant, galloping hyperinflation.

Galloping inflation took place in Germany between 1920 and 1923 and recently in Chile and Brazil.

During galloping inflation, production and even the social order are disorganised. The total wealth of large groups of the population is wiped as money become worthless. Debtors ruthlessly pursue creditors in order to pay off their obligations in valueless money. Speculators profit. Housewives rush to spend their husbands' pay cheques before prices rise still further, but in doing so they only bid prices up even faster.

Paul A. Samuelson

A Situation in which prices are so high and are rising so fast that

"people go to market with money in baskets and return with goods in their pockets."

It is also called run-away or hyper inflation.

Compiler

It occurs when a persistent inflation gets out of control and the value of money declines rapidly to a tiny fraction of its former value and eventually to almost nothing, so that a new currency unit has to be adopted.

Inflation of this kind occurred after both World Wars in Germany, Austria, Poland, and Russia during 1920-23 and in Hungary, Rumania, Greece and China after the Second World War.

J.L. Hanson

GAMBLING (*Theory of value)

Betting, buying lottery tickets, speculation etc. Its purpose is to make easy money, of course, with considerable risk.

Compiler

In economic theory, it refers to the action of individuals in a market situation in which the outcome depends on the actions of people—demanders and suppliers—with conflicting interests.

Seldon and Pennance

Gambling gets attention from economic theorists and from mathematicians not for its own sake, but because in most gambling, the odds or probabilities, are exact and can, therefore, be put to exact analysis. The importance of the analysis of gambling is the light it throws upon choices that are accompanied by risk.

D.S. Watson

Why is gambling such as betting on the horse races or buying a lottery ticket considered such a bad thing? Part of the reason, perhaps the most important part, lies in the field of morals, ethics and religion; upon these the economist as such is not qualified to pass final judgment. There is, however, a substantial economic case to be made against gambling. First, it involves simply sterile transfers of money or goods between individuals, creating no new money or goods. The second economic disadvantage of gambling is the fact that it tends to promote inequality and instability of incomes.

Paul A. Samuelson

GAME THEORY (*Theory of value)

A century of theorizing by economists about what Mind A thinks Mind B will do if he thinks A will do such-and-such culminated in John Von Neumann and Oskar Morgenstern's *The Theory of Games and Economic Behaviour* (1944). This mathematical theory, offers many incisive insights for political warfare as well as economics. (Examples: A teacher picks quiz questions at random from a book; a watchman makes his rounds at random, not in a discernible pattern. Facing you as a smart rival, I shall work hard to maximise my most vulnerable defence knowing you will find out the weakest link in my chain. I bluff at poker, not simply as some think, to win a pot with a weak hand, but rather to ensure that all players do not drop out when I bet high on a good hand).

Oligopoly sometimes breaks out into intermittant warfare. Such a situation, "where two (or more) free wills each choose strategies that will affect both interdependently" constitute the essence of the philosophical problems involved in the theory of games. This theory, which sounds frivolous in its terminology borrowed from chess, bridge and war is fraught with significance and was largely developed by John Von Neumann (1903-1957)--Hungarian-born mathematical genius and one of the three coinventors of the United States hydrogen bomb.

The game theory can also throw light on one of the great needs of our age—the need for altruism (In a more sentimental time, love might be the word.)

The theory of games also provides some tools for analyzing power.

Paul A. Samuelson

One of the most vexing and persistent problems of the businessman is that of outguessing his rival. This problem can be dealt with in a variety of ways. Instead of asking, inductively, what we can infer from the competitors' past behaviour, one seeks to determine a rival's most profitable counterstrategy to one's own "best" moves and to formulate the appropriate defensive measure. This is the approach which game theory has adopted.

William J. Baumol

One of the models of oligopoly developed by John Von Neumann and Oscar Morgenstern in 1944. It applies not only to oligopoly but also to economic questions like demand when uncertainty is present. It is also applied to the problems of subjects other than economics such as business administration, sociology, psychology, political science, military planning.

H.L. Ahuja

GANDHI, MOHANDAS KARAMCHAND (1869-1948) (*History of economic thought)

The Indian economist of economists.

(See *Gandhian Economics*)

Compiler

GANDHIAN ECONOMICS (*History of economic thought)

Mahatma Gandhi was not an economist as such. His economic ideas which have come to be known as "Gandhian economics" are a part of his general philosophy of life.

Gandhiji divided natural resources into current economy (unlimited) resources and reservoir economy (limited) resources and stood for self-sufficiency in basic needs. He opposed artificial fertilization; preferred well irrigation; argued for abolition of ownership of land; advocated the development of village and cottage industries; championed Khadi programme; preferred small industries to large organised industries; denounced the use of machinery by maintaining that "it is machinery that has impoverished India"; felt that industrialisation was unnecessary for any country; favoured co-operation; believed that man was more important than wealth; held that economics and ethic were inseparable; advanced the idea of non-violent economy in which none is expoited"; recommended economic decentralisation; evolved the concept of village Swaraj; charged that the capitalist who had amassed a huge sum was a thief; put forward the doctrine of trusteeship according to which all social property was to be held in trust; deprecated the multiplication of human wants; attacked that employment of children was a national shame; stood for birth control not through contraceptives but through self-control or *brahmacharya*; asked for complete prohibition; and ushered in *sarvodaya* Programme.

Mahatma Gandhi was an utopian socialist. He gave ethical orientation to economics by observing, "I must confess, that I do not draw a sharp or any distinction between economics and ethics . . . . economics that hurt the moral well being of an individual or a nation are immoral and therefore sinful. Thus economics that permits one country to prey upon another is immoral. It is sinful to eat American wheat and let my neighbour, the grain dealer, starve for want of customers . . . . economics to be worth anything, must be capable of being reduced to terms of religion or spirituality . . . . that economics is untrue which ignores or disgraces moral values". Gandhiji's economics was "to manufacture souls and not merely material plenty".

Commenting on economic laws, Gandhiji said, "Application of the laws of economics must vary with varying conditions. Even though I am a layman, I make bold to say that the so-called laws laid down in the books in economics are not immutable like the laws of Medes and Persia, nor are they universal.

Gandhian economic thought in the words of the late professor J.J. Anjaria is "after all, a compromise—a compromise between the ideal of a simple decentralised community life on the one hand, and the demands of modern techniques and science on the other".

Compiler

GANDHIAN PLAN (*Economics of planning)

Mahatma Gandhi (1869-1948) never prepared an economic plan. What is known as Gandhian plan is actually a summation of Mohandas Karamchand Gandhi's economic idealogies by Mr. S.N. Agarwal. In his writings, particularly in *Harijan* and previously in *Swaraj*, Gandhiji sometimes dealt with economic matters, and in the form of curatives of economic maladies, he laid emphasis on certain economic policies which were later summarised together with the points mentioned in his speeches by Agarwal. This came to be known as Gandhian plan. The objectives of Gandhian plan may be put as under:

1. A balanced diet diet yielding 3,600 calories of energy, 20 yards of cloth per man per year, housing accommodation of 100 square feet per head, free and compulsory education, proper medical aid, public utility and recreation facilities for all;
2. Four times increase annually in per capita income;
3. Provision of more employment opportunities;
4. Total investment of Rs. 3,500 crores for a period of ten years;
5. Welfare of rural areas;
6. Self-governing and self-sufficient village communities or gram-panchayats;
7. Productivity in agriculture should be raised by laying stress on collective and co-operative farming;
8. Resources of the plannning finance are to be attained at Rs. 2,000 crores from interal borrowing, Rs. 1,000 crores from created money and Rs. 500 crores from taxation.

Gandhian plan was an ideal plan, and just a paper plan.

A.B. Bhattacharya

In addition to government of India's five year plans, several other plans were drawn up. One of them was Gandhian plan. Principal S N. Agarwal (Ex-member – Planning Commission) put a plan often referred to as the Gandhian plan. It was a very modest plan with an estimated cost of Rs. 3500 crores. Its fundamental feature was to bring about a decentralised economic structure with self-contained villages. The emphasis was more on agriculture than on industry and in industry, on small scale cottage industries rather than larg escale industries.

M.L. Seth

GANGULI, B.N. (*History of economic thought)

An eminent Indian economist and Vice-Chencellor of Delhi University. He died in 1978.

Br. B.N. Ganguli, the 1955 President of the Indian Economic Association, wrote, among others, *Indian Economic Thought* and *Multi-national Corporations* (1974).

Compiler

GANTT SYSTEM (*Economics of labour)

Gantt system which is a sub-type of Task bonus system, is a system of wage payment. It is named after H.L. Gantt, an American who first introduced it.

It is a system in which forty or fifty per cent of the wage is offered as bonus to an employee if a specified piece of work is accomplished within a stipulated period of time, but the task is so serious as the doubling of normal output. The workers who fail to attain the standard (target) will not get bonus. Because of the severity of the task, the workers were detered from attempting to achieve it and thus the system tended to defeat its objective.

Compiler

GARIBI HATAO (*Economics of development)

Hindi expression meaning "banish poverty". It is an objective of Indian planning. It was coined by (late) Mrs. Indira Gandhi, the former prime minister of India. The phrase having been internationalised with its adoption by the U.N.O., has freely entered into the English language.

Compiler

GEARING (*Industrial economics)

The term refers to the proportion of a company's earning that is allocated to prior charges—interest on debentures and preference dividends, the remainder going to the ordinary share-holders. The gearing is said to be high if the prior charges constitute a large proportion of the company's earnings. The gearing in said to be low if prior charges are low.

Compiler

GENERAL AGREEMENT ON TARIFFS AND TRADE (GATT)
(*International Economics)

The agreement signed at Geneva on October 30, 1947, consists of four parts. In Part 1 the minimum obligations which have to be fulfilled by the contracting parties are laid down, relating to the most favoured-nation clause and the schedules of concessions. Part 2 forms a code of fair trade. A new Part 4 has been implemented *de facto* since 8 February,

1965, relating mainly to the expansion of exports by less developed countries.

The aims of the agreement are set forth in the preamble. The general aims are the improvement of standards of living, full employment, a large and steadily growing volume of real income and effective demand, the full use of the world's resources and the expansion of production and international trade. Agreements directed to the substantial reduction of traiffs and other trade barriers and to the elimination of discrimination will contribute the attainment of these objectives.

The accession of new member countries requires a tow-thirds majority vote by the contracting parties.

Unlike the other international institutions, GATT is not an organisation in the strict sense, but rather a kind of club. Its operation consists in the arrangement and holding of conferences at which the member countries grant each other concessions in the field of trade for a certain period or undertake not to increase certain customs, duties during this period. In addition, the Articles of Agreement are revised at regular intervals. The secretariat is headed by a Director General.

The functions of the GATT are:

1. Elimination of discrimination;
2. Stabilization and reduction of import duties;
3. Elimination of quantitative restrictions; and
4. Combating other forms of protection.

The GATT is a code of 'good behaviour' for international trade.

M.A.G. Van Meerhaeghe

A multi-national and multi-lateral treaty relating to international trade signed on October 30, 1947 at Geneva by 23 countries. It came into force on January 1, 1948. India is a member. Originally intended to be a temporary arrangement, GATT has since 1948 developed into a permanent arrangement. It is the single most important agency among the various multi-national organisations such as OECD, IMF, IBRD, ECM, EFTA, CACM, CMEA etc. It is charged with the responsibility of regulating international trade on multinational basis.

It has since its establishment contributed greatly to the rationalisation of world trade and the removal of several bottlenecks which used to crop up before its inception. Its single unique achievement has been the signing on June 30, 1967 of the Final Act concluding the Kennedy Round of trade negotiations. However, in the words of Dr. Raul Prebisch of Argentina, in spite of important achievements to its credit GATT has not been as effective for the developing countries as for the developed.

Compiler

GENERAL ANALYSIS (*Economic methodology)

General or total analysis as distinguished from partial analysis, is the analysis of the economy as a whole.

This technique of analysis was advocated by mathematical economists. Leon Walras (1834-1910), the founder of Laussane School was the first to attempt to portray the problems of general analysis in mathematical terms taking into account of the general inter-dependence of all the economic variables. His work was supplemented and elaborated by his contemporary Vilfredo Pareto (1843-1923). Among others who have contributed to the development of general analysis mention must be made of Ragnar Frisch, Jan Tinbergen, J.R. Hicks, Paul A. Samuelson, C.F. Roos, Eric Lindahl, Gunnar Myrdal, Bertil Ohlin, J. Akerman, Svennilson and Lundberg.

Compiler

GENERAL DEPOSITS (*Monetary economics)

As opposed to special deposits, interest bearing general deposits consist of money or deposit currency in which the bank becomes the owner of the deposit. Should the bank fail, the general depositor becomes a general creditor. These deposits are classified as demand deposits, time deposits, commercial deposits, savings deposits, government deposits, individual deposits which are subdivisible into alternative deposits and joint deposits. In ancient Rome they were called Regular.

Roger Orsingher

GENERAL DEPRESSION (*Business cycles)

A period of situation in which unused resources and unemployment are general.

Gottfried Haberler

GENERAL ECONOMICS (*Economic methodology)

The study of the general equilibrium and dynamics of the whole economy.

Kenneth E. Boulding

GENERAL EQUILIBRIUM (*Theory of value)

When the prices are such that demand equals the supply for every commodity, the economy is said to be in equilibrium.

Robert Dorfman

The concept of general equilibrium varies among different economists. One concept maintains that general equilibrium is the static state, a condition in which all prices are long-run equilibrium prices; each person is spending his income in the manner that yields him the greatest

satisfaction; each firm and industry is in a state of equilibrium with respect to prices and output; and the supply and demand for factors of production are equated at equilibrium prices. In short, general equilibrium is a condition that involves no economic motive for change.

Albert L. Meyers

The economy is said to be in a state of general equilibrium if the supply of every commodity is equal to the demand for it.

William J. Baumol

The concept of the general equilibrium of the whole price mechanism was first rigorously developed by Leon Walras, a French economist.

Compiler

GENERAL EQUILIBRIUM ANALYSIS (THEORY) (*Economic methodology)

An analysis that takes account of the inter-connections among prices.

Robert Dorfman

General equilibrium theory was developed to take account of a cardinal feature of the structure of our economy; the inter-dependence of its parts.

Two types of inter-dependence relationships which have received considerable notice are substitutability and complementarity.

William J. Baumol

When all prices are viewed as dependent upon one another, the theory of prices become general equilibrium theory. The French economist Leon Walras (1834-1910) was the first to design a model of the general equilibrium of a purely competitive economy at the end of the 19th century. Others have constructed refinements of Walras' model, but no radical modifications have yet been made.

In the general equilibrium model, the demands of households for commodities depend on the prices of all commodities and of all resources. The supplies of commodities from firms depend on commodity prices, the coefficients of production, and the prices of resources. The demand for each commodity equals its supply, all demands and supplies being compatible because of their inter connections through the network of prices.

The general equilibrium theory advances the understanding of a private enterprise economy. It achieves efficiency. It has furnished the conceptual foundation for input-output analysis which was created by Wassily Leontief of Harvard University. The theory also gives standards of efficiency for the welfare of the whole economy.

Donald S. Watson

It is that branch of economic theory which deals with the structure of prices and output of the economy as a whole. Simply stated the general equilibrium theory studies the interrelationships of prices and outputs of commodities and resources. The general equilibrium theory is important inasmuch as it emphasises the interdependence of the various sectors of the economy. It is a very complicated type of analysis and is possible only with the aid of the mathematical equations.

M.L. Seth

GENERAL INFLATION (*Monetary economics)

The inflation that accompanies full employment of all other resources.

Dudley Dillard

GENERAL MOTORS CORPORATION (*Economics of transport)

One of the World's most successful enterprises of America.

Compiler

GENERAL PLANNING (*Economics of planning)

Planning may be general as well as detailed. General planning concerns itself with major issues only. It lays down only the broad outlines of future development. (Detailed planning, on the contrary, not only lays down guiding principles but also furnishes details of how those principles are to be given practical shape. For example, general planning may lay down only the pricipal targets of production but detailed planning will suggest how those targets are to be realised in actual practice).

Prof. F. Zweig prefers general planning to detailed planning on the ground that "the apparatus of detailed planning is, as a rule, more bureaucratic, heavier and slower and leads to over-rigidity and over-charging of production".

M.L. Seth

Comprehensive and integrated plan conceived and executed by a central authority.

K.K. Dewett

GENERAL PRICE LEVEL (*Monetary economics)

The average of the prices of all commodities and services and property rights currently bought and sold.

Raymond Kent

GENERAL PROPERTY TAX (*Public finance)

A tax on property in general without differentiation according to class or characteristics.

International Encyclopaedia of Social Sciences

GENERAL STRIKE (*Economics of labour)

The sympathetic cessation of labour by the majority of the workers in all the vital industries of any locality or region.

International Encyclopaedia of Social Sciences

GENERAL THEORY OF EMPLOYMENT, INTEREST AND MONEY (*Keynesian economics)

J.M. Keynes's General Theory of Employment, Interest and Money (1936) is, from the standpoint of modern macro-economics, the greatest literary success of our epoch. It was a feat of leadership. It taught England, in the form of an apparatus, general analysis, Keynes's own personal view of her social and economic situation and also his own personal view of what should be done about it. In addition, impinging as it did upon the moral atmosphere created by the depression and upon rising tide of radicalism, the message of the book, issued from the vantage ground of Cambridge and propagated by many able and faithful disciples, met with equal success elsewhere and particularly in the United States.

The analytic apparatus of the *General Theory* is, first essentially static. Second, this static theory is not the statics of long-run normals but the theory of short run equilibria. Third, the most important point in this connection is that, of all the aspects of the investment process, it is only the expenditure effect of new investment which enters the model. Fourth, though aggregative Keynesian analysis, no doubt for the sake of simplicity presupposes 'free' if not actually 'pure', competition in all commodity and factor markets. Fifth, everybody is supposed to react to a particular kind of 'real' values namely, to prices expressed in wage-units or prices divided by an average money wage per unit of labour, which is determined by bargains between employers and employees.

Within the framework set by these five points, Keynesian analysis—the analysis of current national income—works five endogenous variables, that is variables which the system is to determine: national income itself, employment, consumption, investment, and the rate of interest; and one exogenous variable that is, given to the system by the action of the 'authorities', quantity of money.

Joseph A. Schumpeter

The economic epic published in 1936 by J.M. Keynes. Within the first dozen years following its publication, the book had more influence upon the thinking of professional economists and public policy-makers than any other book in the whole history of economic thought in a comparable number of years. Like Adam Smith's *Wealth of Nations* in the 18th century and Karl Marx's *Kapital* in the 19th century, Keynes' *General Theory* has been the centre of controversy among both professional and non-professional writers. Smith's book is a ringing challenge to Mercantillism, Marx's book is a searching criticism of capitalism and Keynes's book is a

repudiation of the foundation of *laissez-faire*. This work was published when he was fifty-two years of age (he lived to be sixty-two). In the title of the book, the emphasis is on the word "General." His theory deals with all levels of employment in contrast with what he calls "Classical economics" which is concerned with the special cases of full employment. *General Theory* explains the determinants of volume of employment at any given the whether it happens to be full employment, widespread unemployment or some intermediate level.

Dudley Dillard

GENERAL UNEMPLOYMENT (*Economics of labour)

Mass unemployment. It is often called Keynesian unemployment. Keynes's *General Theory* is the basis for most modern analysis of general unemployment.

Charles L. Schultze

GENEVA CONFERENCE (1947) (*International economics)

The Conference that gave birth to General Agreement on Tariffs and and Trade (GATT).

Compiler

GENOA CONFERENCE (1922) (*Monetary economics)

It recommended that order could be brought out of the monetary chaos created by the First World War if each country would create a central bank and give it the control of the banking and currency arrangements. The same resolution was adopted by the Brussels Conference (1920).

Compiler

GEOMETRIC MEAN (*Statistics)

Geometric mean is the nth root of the product of items of a series. Thus, if the geometric mean of 3,6 and 8 is to be calculated, it would be equal to the cube root of the product of these figures. Similarly, the geometric mean of 8, 9, 12 and 16 would be the fourth root of the product of these four figures.

Symbolically

$$g = n\ m_1 \times m_2 \times m_n \ldots . m_n$$

where g stands for the geometric mean, $_n$ for the number of items and m for the volumes of the variable.

For the calculation of the geometric mean by the above process, the number of items has to be very few. When the number of items is large and their size is big, calculations have to be done with the help of logs.

Geometric mean is the anti-log of the arithmetic average of the logs of the values of a variable.

D.N. Elhance

GEOMETRIC PROGRESSION (*Mathematical economics)

A geometric progression or series consists of terms which increase (or decrease) from one term to the next by given factor, called the common ratio. In general, if the first term is *a* and the common ratio *r*, the series is $a+ar+ar^2+ar^3+\dots\dots\dots+ar^{n-1}+\dots\dots\dots$

(An arithmetic secries onsists of terms which increase or decreese from one term to the next by a given amount, called the common difference. If the first is *a* and the common difference *d*, the series appears.

$a+(a+d)+(a+2d)+\dots\dots\dots+(a+n\text{-}d)+\dots\dots\dots$).

R.G.D. Allen

A series of numbers increasing by the same multiple, e.g. 1,2,4,8,16, 32,64,128,256 etc.

Rev. T.R. Malthus said in 1798 in his *Essay* that population increased in a geometric progression whereas the food-stuff increased in an arithmetic progression.

Compiler

GEORGE, HENRY (1839-1897) (*History of economic thought)

A world famous American economist.

Henry George was born in 1839 in Philadelphia. Though his mother was a religious school-teacher, George did not do well in school, and at the age of sixteen shipped before the mast on a sailing vessel. He spent two years at sea. After his return, he started learning Printing but was discharged by the management. Then he set out for California to try his luck in gold mining. He failed. He married young. Family responsibilities (and no job) led him to lead a poverty-stricken life in which actual hunger sometimes figured. The problem of poverty seemed to him the centre of humanity's woes. He was puzzled by "the persistence of poverty amidst advancing wealth". All this time he had been a habitual reader. Against all odds, he managed to become an editor and something of a newspaper entrepreneur. He moved to New York, ran for mayoralty in 1887 on labour ticket and was defeated by a narrow margin. In 1897 he contested for the second time but died in the midst of campaign.

Henry George has died but Georgian economics is with us. There are Henry George Schools of Social Science in all the major cities of America and there are a few even outside America. *The American Journal of Economics and Sociology* is a Georgian publication.

Henry George is the author of famous and polemical *Progress and Poverty* (1879). This book was translated into many languages and by 1905, more than two million copies of the book had been sold.

George, though a self-taught economist, 'eclipsed' the professional economists of his time. He wrote (1) *Our Land and Land Policy* (1871), (2) *Progress and Poverty* (1879), (3) *Social Problems* (1883), (4) *Protection of*

Free Trade (1886) and (5) *The Science of Political Economy* (1897) (Posthumously published by his son).

"George observed that the worst pauperism, as well as the greatest riches, could be found in the oldest centres of industrialism". Why such a paradox? The answer must lie in the distribution of the wealth produced. He examined the theories of wages, profits, interest and rent and found them all unsatisfactory. Rejecting the Classical "wages-fund" theory, George remarked, "wages instead of being drawn from capital, are in reality drawn from the product of the labour for which they are paid".

The Malthusian theory of population, said George, was not in accord with what we know about population or what we know about production. Total wealth has increased faster than population in all industrial nations.

According to George, poverty of labour is the result of unjust distribution and not of any natural law governing wages or population.

Ricardian law of rent appealed to him as axiomatic. But he gave to it a new orientation and meaning. To George rent that accrued to the owner of land was the product of all the factors of production. But the owner of land enjoyed monopolistic rights and therefore, he took away the entire surplus. He thus held that private ownership of land was the cause of inequitable distribution of wealth and poverty. George made an original contribution to the theory of rent by arguing that the increase in value to land was not due to difference in fertility but due to the growth of population in the neighbourhood and the general increase in the productivity of society. To get rich they buy not the best farm land, but tract which will turnout to be near the centre of a growing city. Since rent was an unearned income, George thought that land ought to be public property. But he hesitated to recommend drastic and revolutionary measure such as confiscation of landed property or nationalisation of land.

George (in *Progress and Poverty*) proposed to confiscate all rents in the manner of Physiocrats by imposing a single tax on ground rent. In the words of Schumpeter, the panacia of George was nationalisation of rent of land by confiscatory tax. He claimed that this measure would abolish poverty and economic crises, the latter being simply the result of speculation in land values. It would be a single tax because, he thought that its proceeds would be sufficient to defray the entire expenses of the state and it would encourage trade and industry. He elaborated the virtues of the single tax at great length. The result was that he was widely misunderstood and deprecated.

George proposed abolition of private ownership of capital, and the gains from private ownership of land. Economists disagreed with him and the land owners raised cudgles against him.

Attaching the greatest practical importance to political economy,

George wrote in his the *Science of Political Economy* "it is the science to which must belong the solving of problems that are in all civilised countries clouding the horizon of the future—the only science that can enable our civilization to escape already threatening catastrophe."

George who proposed to "appropriate all rental by taxation.......... to abolish all taxation save that upon land values" and who influenced Fabian society became something of a prophet.

Compiler

GERMAN INFLATION (*Monetary economics)

Germany was rocked by great inflation in 1923. The inflation entirely destroyed the German people's faith in its money and the authorities produced a new currency— the Renten Mark which was accepted by the people as a 'good' money.

The German inflation had a very bad reputation. Prices rose with staggering rapidity, until at one time they were one million times the pre-war level. This was inflation without recovery with a vergeance. Overnight, every form of property and income lost its real value. Hundreds of thousands of families were ruined. It wiped out the German middle class and made the Nazi revolution possible.

In the great German inflation of 1923 prices were rising a hundred fold in a day. This inflation was due to overcreation of money by the central bank.

Geoffrey Crowther

GHERAO (*Economics of labour)

An Indian technique adopted by the labourers to get their demands fulfilled. In this the workers surround the employer or an authority not allowing him to move. *Gherao* as a method of protest has become more popular than the weapon of strike.

Compiler

GHOSH, ALAK (*History of economic thought)

An eminent Indian economist of Calcutta University. He has written several books and articles in the realm of applied economics. *Indian Economy* is his most important work.

Compiler

GIBSON'S PARADOX (*Monetary economics)

The term coined by J.M. Keynes to represent the movement of the price level and the rate of interest in the same direction over a long period of time. (Generally, prices and interest rates move in the opposite direction. When the money supply increases, prices increase and the rate of interest (price of money) falls and when there is a decline in the quantity of money in circulation, the prices fall and the interest rate goes up. This

happened during the period 1791-1939. But Gibson paradox was falsified between 1939-46 with the movement of prices and interest rates in the opposite direction).

Compiler

In 1803, W. Thornton had argued that the expansion of bank credit could express itself or become effective only through a reduction in the money rate of interest. As soon as the addition of the credit ceases, prices adjust themselves to the new size of the money stock and the rate of interest returns to its former equilibrium level determined by the rate of return on real capital. Following this argument, one would expect the bank rate and the general price level to move in the opposite directions. But Thomas Tooke, the author of the influential *History of Prices* and the foremost critic of Ricardian monetary theory, showed that, on the contrary, the market rate of interest and the price level were positively correlated. This finding, corroborated in later days, was dubbed as "Gibson's Paradox" by Keynes in his *The Treatise on Money* (1930).

Mark Blaug

GIDE, CHARLES (1847-1932) (*History of economic thought)

The French co-author of the famous *A History of Economic Doctrines.*

Compiler

GIFFEN EFFECT (*Theory of value)

The income effect can be negative. But again, the substitution effect is positive and outweighs a negative effect, so that a fall in price still causes the consumer to buy more. Theorists like to speculate, however, on the possibility of a negative income effect so strong that it swamps the substitution effect, causing the consumer to buy *less* when price falls. This is called the Giffen effect.

D.S. Watson

GIFFEN GOODS (*Theory of value)

Giffen good is a special case of inferior good and is named after Sir Robert Giffen (1837-1910) who in the 19th century pointed out: "a rise in the price of bread makes so large a drain on the resources of the poor labouring families they consume more and not less of it."

Giffen good is an inferior good, but every inferior good cannot be a Giffen good.

M.C. Vaish

Giffen goods are inferior goods because in their case income effect is negative; but they are special type of inferior goods inasmuch as in their case, negative income effect is stronger than positive substitution

effect. In the case of ordinary inferior goods, the negative income effect is weaker than the positive substitution effect.

K.K. Dewett

These goods refer to inferior goods. Cheap food-stuffs are an example of Giffen goods. The very poor people may be able to buy a certain amount of these cheaper food-stuffs together with a little of the more expensive food-stuffs. A rise in the price of the cheaper food-stuffs may lead them to reduce their expenditure not on the cheaper food-stuffs, but on the more expensive food-stuffs and thus make up the deficiency by purchasing more of the cheaper food-stuffs despite the fact that their prices have gone up. The poor people do this because this is the only way in which they can secure the same amount of food as before without increasing their expenditure on food.

M.L. Seth

GIFFEN, ROBERT (1837-1910) (*History of economic thought)

An English statistician, economic journalist, writer on finance and civil servant. This meritorious and eminent economist, worked for several years in a solicitor's office in Glasgow. In 1862 he moved to London. From 1868 to 1876 he served as assistant editor of the *Economist* under Walter Bagehot. From 1976 to 1897, he served on the Board of Trade. He became the chief of the Statistical Development and later the Head of the Labour Department. He directed the first national Census of Wages in 1886.

His *Progress of the Working Classes in the Last Half Century* (1884) and his *Growth of Capital* (1889) are "landmarks in the history of economic statistics". The latter work is one of the early estimates of the national wealth, which is still consulted.

Giffen valiantly defended gold standard and ferociously opposed Fancy (i.e. non-gold) monetary standards. He was a free trader.

Giffen discovered an important exception to the law of demand which has been since called "Giffen paradox".

Compiler

GIFFEN'S PARADOX (*Theory of value)

A situation in which consumers buy less of the goods when its price falls and more of the good if its price rises.

The good in question is called Giffen good which is a special type of inferior good. Giffen paradox which owes in name to Sri Roberr Giffen, a contemporary of Alfred Marshall, is an exception to the law of demand and it is also termed as Giffen effect.

The "Giffen paradox" was introduced by Professor Alfred Marshall in the third edition of his *Principles of Economics* (1895).

Compiler

A negative income effect combined with a weak substitution effect. It states that the whole aggregate demand curve for bread, and particularly the demand curve for bread among the poor classes is positively inclined.

Mark Blaug

GIFT (*Public finance)

A class of public revenue. Voluntary contribution from non-governmental donor generally for specified purpose.

Philip E. Taylor

A gratuitous transfer during life-time.

Andley and Sundharam

GIFT OF NATURE (*Theory of value)

A characteristic peculiar to land as suggested by the Classicists. In the broader sense the term is applied to all the free goods.

Compiler

GIFT TAX (*Public finance)

Tax on gift *inter vivos* i.e. duty on transfer of property during lift. It is designed to avoid the possibility of giving away property before death and thus escaping some or possibly all tax.

In India gift tax was introduced on the recommendation of Prof. Nicholas Kaldor on April 1, 1958 as a complement to the estate duty and the wealth tax with the aim of checking the evasion of the above mentioned two taxes and expenditure tax.

Compiler

GIFT-EDGED SECURITIES (*Monetary economics)

Irredeemable government stocks.

A. W. Stonier and D. C. Hague

The government securities which are highly liquid.

F. Benham

GIRI, VARAHGIRI VENKAT (1894-1980) (*History of economic thought)

A famous Indian specialist in labour economics, trade union leader and statesman.

Born on August 10, 1984 in Berhanpore, V. V. Giri, Bar at-law was educated in National University, Ireland. As a student he took part in the Sinn-Fien movement. On his return from England in 1916, he joined the Indian Congress. From 1922 onwards he worked with the late Shri N. M. Joshi for the establishment of the trade union movement in India on sound lines. He was one of the principal founders of the All India

Railway Men's Federation. He was twice elected President of the All India Trade Union Congress. In his brilliant career, Giri held a variety of public positions such as High Commissioner, Governor, Minister, delegate, President of Trade Unions, Vice-President of India and finally the President of India.

On July 19, 1969 Giri in the capacity of Acting President of India promulgated the Banking Companies (Acquisition and Transfer of Undertakings) Ordinance nationalising 14 top Indian scheduled banks.

Giri is the author of only one but permanently enduring book—*Industrial Relations—Labour Problems in Indian Industry*. Pandit Nehru wrote foreword to it. Giri is famous for what came to be known as Giri Approach.. He died on June 24, 1980.

Compiler

GIRI APPROACH (*Economics of labour)

The plea of V. V. Giri that attempts are increasingly to be made to settle all industrial disputes by mutual negotiations between the employers and the employees failing which conciliation officers are to be approached instead of compulsory adjudication, is referred to as Giri approach.

A. B. Das and M. N. Chatterji

GIRO ORDER (*Monetary economics)

An order to a bank to pay a certain sum of money to a certain individual, but unlike a cheque sent directly to the bank rather than to the payee.

Walter W. Haines

GLUT (*Theory of value)

A large surplus or excess of supply of a commodity caused by over-production and/or under-consumption.

Compiler

GODWIN, WILLIAM (1756-1836) (*Demography)

Famous English philosopher and optimistic writer. Godwin published in 1793 the sensational book entitled *Enquiry Concerning the Principles of Political Justice and Its Influence on General Virtues and Happiness.* According to it which J. A. Schumpeter described as the radical bible of the day, the government was to blame for the unhappiness and misfortune of man. The *Essay* of T. R. Malthus might never have been written if his father, Daniel Malthus, had not been an admirer of the philosopher Condorcet whose ideas had been translated and propogated by William Godwin.

Godwin was not afraid of population growth because he thought that either the scientific development would increase the supply of goods or the posterity would limit population. He observed that "there is a principle

in human society by which population is perpetually kept down to the levels of means of subsistance". In his another book, *Avarice and Prodigality* (1799) Godwin reiterated his theory of human perfectability and expressed his full confidence in the population being within reasonable limits.

In 1797 Godwin published his essays under the title *The Enquirer.*

Compiler

Possibly Malthus's *The Essay on Population* would not have been written and probably it would not have appeared in 1798, if William Godwin had not published, in 1793 his *Enquiry.* At once sublime and rediculous, this book was the sensation of the moment. Its central argument was : "Man is perfectible, or in other words susceptible of perpetual improvement", "truth is omnipotent", and "what is born into the world is an unfinished sketch, without character or decisive features impressed upon it".

According to Godwin, the sources of all human troubles were bad government and poor institutions. Education could remedy all difficulties. The human reason could easily triumph over sexual instincts.

Robert Lekachman

GOKHALE, GOPAL KRISHNA (1866-1915) (*History of economic thought)

A celebrated Indian reformer and nationalist.

Gokhale, not an economist in the strict sense of the term, commented upon Dadabhai Naoroji's Drain Theory and advocated protection. He was the first Indian to emphasize that Governmental income and expenditure should be directed to remove the deficiencies in the economic system. He opposed that salt duty levied by the British Indian Government ; expressed his strong concern over the growing military expenditure; and reacted against the increasing imports of British cotton manufactures into India as a result of which a large number of Indian weavers were affected.

Gokhale was born on May 9, 1866 at Kotluk in Ratnagiri district. He migrated to Kolhapur in 1876 for education. After receiving his education at Rajaram College, Kolhapur ; Deccan College, Poona and Elphinstone College, Bombay, he became professor of mathematics, history and economics in 1895 in Ferguson College, Poona.

Gokhale lived only 49 years but within such a short life, he reached the zenith of successful career. He resigned his professorship in 1902 and entered politics. In 1905 when he founded Servants of India Society, he was elected the president of the Indian National Congress.

Compiler

GOKHALE INSTITUTE OF POLITICS AND ECONOMICS (*Economics of development)

An internationally recognised economic research centre founded in Pune (India) in 1930 by the late professor D. R. Gadgil. Its aims are : study of research into the various economic and political problems of India and the training of workers for such study and research. It is headed by Director, Dr. Gadgil was for a long time its founder director. On his joining the Planning Commission, Dr. V.M. Dandekar became its Director. Prof. N. K. Rath is its present (1983) Director.

Compiler

GOLD BULLION STANDARD (*Monetary economics)

When gold coins do not circulate, but the Central Bank is nevertheless under legal obligation to buy and sell gold in exchange for currency at fixed price and in unlimited amounts (sometimes with a minimum amount fixed but never a maximum), it is known as "gold bullion standard", as the currency is then convertible not into gold coin but gold bullion.

Geoffrey Crowther

System under which Central Banks are under obligation to convert their currencies into gold bars for the purpose of shipment abroad, but not into coins for domestic circulation.

Paul Einzig

Gold standard in which no gold coins circulate but the Government is always prepared to buy and sell gold bullion at a fixed price and places no restrictions on its import or export.

Frederic Benham

Monetary system in which other kinds of money can be converted only into stamped bars, or ingots, of gold of guaranteed weight and fineness, known as bullion.

Raymond Bye

A monetary standard in which :

1. The monetary unit is declared to be a specific quantity of gold.
2. The government or central bank undertakes to buy and sell unlimited quantities of gold at the established price.
3. There is a free gold market.
4. All kinds of credit money are redeemable at par in gold bars.

Following the World War I, the most popular form of gold standard in countries with adequate reserves was the gold bullion standard.

Raymond Kent

The gold bullion standard was in almost universal application before the First World War (1870-1914) and through propitious circumstances (relative peaceful international situation, London's role as international financial centre); appeared to give a certain degree of satisfaction.

In 1914, the obligation for central banks to give gold in exchange for paper money was abolished. To remedy the gold scarcity, the Genoa Monetary Conference in 1922 recommended the adoption of the gold exchange standard.

M.A.G. Van Meerhaeghe

The Hilton Young Commission appointed in August 1925 recommended gold bullion standard for India. Actually it was not gold bullion standard but gold bullion-cum-sterling exchange standard and thus after September 21, 1931 when England went off the gold bullion standard, India's monetary system became simply the sterling exchange standard.

Compiler

GOLD CERTIFICATE (*Monetary economics)

A form of currency or paper money that constitutes a claim against a corresponding value of gold bullion held by the Treasury.

This type of money, once in general circulation is now used only in hallowed precincts of the Federal Reserve System (U.S.A.).

R. M. Havens, J. S. Henderson and D. C. Crammer

GOLD CERTIFICATE RESERVE (*Monetary economics)

A claim by the Federal Reserve Banks (U. S. A.) on Treasury gold.

R. M. Havens, J. S. Henderson and D. C. Crammer

GOLD CLAUSE (*Monetary economics)

The Government of a country which has in the past frequently devalued its currency may find it difficult to borrow in the capital market unless the loan contains a "gold clause" which offers lenders the security of repayment in terms of the gold equivalent of the currency at the time loan was floated. Thus, in such cases if by the date of redemption the currency has fallen to only half its value in terms of gold as when the loan was issued repayment will be made at double the amount of the currency that was borrowed.

J. L. Hanson

GOLD COIN STANDARD (*Monetary economics)

It is often called "old type of gold standard" because most of the early gold standards were of this sort. It is also called "the gold circulating system", for gold coins were freely issued and actually available for circulation.

Gold coin standard is the monetary system in which monetary unit is defined in terms of gold, unlimited coinage of gold at virtually no cost to the supplier of gold is provided, free and unlimited melting of gold coin is permitted, free convertibility of gold money and all other types of money at parity is provided and free import and export of gold is allowed and sixthly gold is given unlimited legal tender powers.

Lester V. Chandler

A country is said to have gold coin standard when its monetary institutions fulfil the following requisites :

1. The monetary unit is declared to be a specific quantity of gold.
2. There is free coinage of gold.
3. There is a free gold market.
4. Gold coin is legal tender for the payment of public and private obligations.
5. All kinds of credit money are redeemable at par in gold coin.

Raymond Kent

Gold coin standard also known as gold circulation standard or full gold standard was in vogue upto 1913.

Compiler

GOLD COINS (*Monetary economics)

Gold coins were issued in England first in 1257. Then came the florin (1343), the noble (1344), the royal (1465), angel (1466), the sovereign (1489), the crown (1526), the unite (1604), guinea (1663) and finally sovereign (revival) (1816).

Compiler

GOLD CURRENCY STANDARD (*Monetary economics)

See "Gold coin standard".

Compiler

GOLD DRAIN (*International economics)

A flow of gold abroad which has a tendency to restrict the ability of the monetary system to expand.

W. W. Haines

GOLD EXCHANGE STANDARD (*Monetary economics)

It covers a wide variety of monetary arrangements : In general, however, it refers to a system in which a country does not redeem its money directly in gold but redeems it in a foreign currency that in turn is in some sense redeemable in gold. Moreover, the country's "gold reserve" is not in the form of claims against foreign moneys that have fixed gold values, at least in foreign payments

Lester V. Chandler

A system under which the legal obligation resting upon the Central Bank, is to redeem the currency not in gold itself but in some other currency which is itself convertible into gold.

This system is usually adopted by a small poor country which designates as the currency in which it will redeem its own notes at a fixed rate the currency of one of the large gold standard countries.

Geoffrey Crowther

A type of gold standard in which :

1. The monetary unit is declared to be a specific quantity of gold.
2. The government or Central Bank undertakes to buy and sell at an established price unlimited quantities of drafts (Cheques) drawn upon one or more foreign countries that operate upon the gold coin or gold bullion standard.
3. There is a free gold market.
4. All kinds of credit money are redeemable at par in gold drafts.

Raymond P. Kent

System under which the international stability of a currency is maintained by its convertibility at a fixed rate into another currency based on gold or stabilized in terms of gold.

Paul Einzig

Gold exchange standard is said to exist in a country when gold coins do not circulate within the country but the local currency which consists of coins of other metals or paper currency can be converted into gold at a fixed ratio, this gold being made available at a foreign centre where the gold reserves are kept.

India was on gold exchange standard during the period 1900-17.

A. B. Das and M. N. Chatterji

To remedy the gold crisis, the Genoa Monetary Conference in 1922 recommended the adoption of the gold exchange standard.

M. A. G. Van Meerhaeghe

GOLD PARITY STANDARD (*Monetary economics)

A System under which the authorities are under no obligation to convert the currency into anything else but they accept the obligation to keep the exchange rate of the currency stable in terms of gold. This form is very similar to what will prevail in future under the aegis of the International Monetary Fund.

Geoffrey Crowther

Under the agreement, the exchange stabilisation funds were to buy and sell gold or their currencies of one another signatories thus reaping the advantages of the gold standard-exchange stability and growth of international trade.

This arrangement was known as gold reserve standard. It lasted for about three years from September 1936 to September 1939 when the Second War broke out.

M.C. Valsh

GOLD RUSH (*International economics)

Strong demand for gold in the free markets by private buyers for purposes of speculation or hoarding or by Central Banks for strengthening their reserves.

Paul Einzig

GOLDSMITHS (*Monetary economics)

Originally craftsmen in jewels and precious metals (working goldsmiths) who developed in the 17th century the modern technique of fractional reserve banking (goldsmith bankers).

W.W. Haines

GOLDSMITH'S NOTES (*Monetary economics)

A promise by a goldsmith to pay specie to the bearer on demand. It is an early form of paper money.

W.W. Haines

GOLD STANDARD (*Monetary economics)

A state of affairs in which a country keeps the value of its monetary unit and the value of a defined weight of gold at an equality with one another.

Sir Dennis H. Robertson

In the narrower sense, it signifies a monetary system under which gold coins of standard specification or gold certificates with hundred per cent gold backing, form the circulating medium.

In the wider sense, it covers also the case where notes or silver coins are legal tender provided they are convertible into gold at a fixed rate.

Gottfried Von Haberler

It is simply a law, passed by the legislative authority of a country like any other law, which says that some authority in the country (usually the Central Bank or the Treasury of the Government itself) shall be obliged to exchange gold for the money of the country, and money of the country for gold, at a fixed legal rate.

Kenneth E. Boulding

The term is a generic term applied to a broad category of monetary systems that have one common characteristic: their monetary units are in some sense kept at a constant value in terms of gold. But this common characteristic should not be allowed to obscure the numerous and highly important differences among the many systems that have been called gold standards.

The gold standard is a monetary system in which the nation's monetary unit is stabilized in terms of gold.

Lester V. Chandler

A country is one the gold standard when its Government keeps the purchasing power of an unit of its currency equal to the purchasing power of a definits weight of gold.

Frederic Benham

A country is on the gold standard when its currency is freely convertible into gold at a fixed price.

Cairncross

System under which the international value of a currency is kept stable in terms of gold and in terms of other currencies based on gold by means of its free convertibility into gold.

Paul Einzig

A monetary system in which other kinds of money are convertible into gold coin, which circulates from hand to hand.

Raymond Bye

A country is is on a complete gold standard when its unit of account is a fixed weight of gold of declared fineness.

Briggs and Jordan

A situation in which a country (1) defines its currency as given weight of gold, (2) provides convertibility between gold and other forms of currency, and (3) permits free movement of gold.

Walter W. Haines

Actually, the old gold standard prevailed in its heyday only for a brief-century prior to 1914. Before the nineteenth century, England had been more on a silver than a gold standard, and had stumbled on to the gold standard as a result of market revaluations of the two precious metals without anyone's realizing it. Her great prestige caused France, the United States, and the rising empires of Germany and Japan to adopt the gold standard later.

Paul A. Samuelson

Under the gold standard system, the currency unit is exchangeable for a fixed quantity of gold. The Central Bank buys and sells gold in unlimited amounts at a fixed price. International gold movements are unrestricted and there is full convertibility.

The U.K. left gold standard on 21 September 1931. In 1933 America followed suit.

M.A.G. Van Meerhaeghe

The gold standard was the dominant international monetary system in the last third of the twentieth century and the first third of the twentieth. Up to the First World War it operated in such a way as to achieve a tolerable degree of internal and external balance in the world; after its restoration in the twenties it worked much less satisfactorily.

A.C.L. Day

England was the first country to adopt gold standard in 1816. Germany adopted in 1871 and the U.S.A in 1873 when the silver dollar was abolished. The gold standard was abandoned during the 1914-18 War. It was fully restored by 1928. England returned to the gold standard in May 1925. The process of final abandonment of the gold standard started with the onset of the Great Depression in 1929. When England went of the gold standard Keynes was rather happy. The U.S.A. abandoned gold standard in 1933. The abandonment of the gold standard by France—the third leading gold standard country—in 1936 was the third and the last vital nail that was fixed to the coffin of gold standard subjected to unceremonial burial in 1936.

M.C. Vaish

A gold standard is a monetary system in which the unit of value in which prices and wages are customarily expressed, and in which the debts are usually contracted, consists of the value of a fixed quantity of gold in an essentially free gold market.

E.W. Kemmerer

The gold standard is an arrangement whereby the chief piece of money of a country is exchangeable with a fixed quantity of gold of a specific quantity.

W.A. Coulborn

Gold standard is a device for maintaining the stability of exchange rates.

Geoffrey Crowther

Gold standard was practised in various forms such as gold coin standard, gold bullion standard, gold exchange standard and gold reserve

standard. Under the aegis of the I.M.F. we have what is called gold parity standard. Crowther distinguishes between domestic and international gold standard.

Compiler

GOLD TRANCHE (*International economics)

That portion of the subscription of a member of the International Monetary Fund to be paid in gold.

Compiler

GOOD (*Theory of value)

The term 'good' is said to have been coined (in economics) by Alfred Marshall.

Compiler

Goods (plural of good) are all durable things or things that satisfy human wants. They are personal or material or immaterial.

Alfred Marshall

Anything that satisfies human wants.

Albert L. Meyers

Anything that has utility.

Raymond Bye

Objects, many identical units of which are available and which are the object of trade.

Knut Wicksell

Karl Menger asserted that for a thing to be a good (Gut) or for it to ecquire a good-character (Guter-qualitat), all the following four conditions must co-exist :

(a) There must be a human need.
(b) The thing must have adaptability (or properties) to be placed in causal correlation with the satisfaction of this need.
(c) Man must recognise this need—satisfying power of the thing.
(d) Man must have sufficient control over the thing to make it subserve the given need.

Manmohan Singh

The term 'good' covers commodity and service, and it is therefore, redundant to speak of "goods and services".

Goods are classified as (a) material and non-material goods, (b) free and economic goods, (c) durable and perishable goods, (d) personal and

impersonal goods, (e) consumer and producer (investment) goods, (f) transferable and non-transferable goods, (g) private and public goods, (h) specific and non-specific goods, (i) necessaries, comforts and luxuries, (j) inferior and superior goods, and (k) Giffen goods.

Compiler

GOODS IN PROCESS (*Industrial economics)

The things which are not complete in themselves and which must undergo a complete transformation of form before they render services. Raw materials of all kinds such as wheat flour, coal or iron, are good examples of this category. These are frequently called "circulating capital" as they must be completely transformed physically before they yield services.

Kenneth E. Boulding

GOODWILL (*Industrial economics)

Reputation earned by a firm i.e. name and fame established by it in the market. Goodwill becomes important when the firm is being bought by another concern, the value being determined by goodwill.

Compiler

That part of the value of an established business which is attributable to the continued patronage of its customers. The term seems to have been used in England first in 1571.

International Encyclopaedia of Social Sciences

GOPAL, M.H. (B. 1904) (*History of economic thought)

An outstanding Indian economist and a specialist in Indian fiscal and public economics.

Gopal, B.A. (1924), M.A. (1926), Ph.D. (1930), D.Sc. (1972), D.Litt. (1974) was born in Mysore city, and studied at Marimallappa's Middle School, Maharaja's High School, Maharaja College, Elphinstone College, Bombay School of Economics, London School of Economics, Bombay Law College and Lincoln's Inn London. In 1976 he received D.Litt. (Honoris causa) from University of Mysore.

Professor Gopal who was the President of the Indian Economic Association in 1958 has held the following posts.

1. Assistant Professor of Economics, University of Mysore, 1930.
2. Hon. Director, Bureau of Economic Research, Mysore 1940-50.
3. Research Reader in Public Finance, University of Delhi, (1950).
4. University Professor of Economics, Andhra University, 1950-53.
5. Visiting Scholar, Harvard University, U.S.A., 1953-54.
6. Professor of Economics, University of Mysore, 1954-56.
7. Professor of Economics (Research Methodology), Ford Foundation Unit, University of Madras, 1956-59.

8. Consultant, National Council of Applied Economic Research, New Delhi, 1959-60.
9. Member, Railway Rates Tribunal, Government of India, 1961-64.
10. Member, Economists' Consultative Panel, Third Plan.
11. John Hay Whitney Visiting Professor at Western Maryland, U.S.A., 1964.
12. Consultant, U.N.O., Fiscal Division, 1964.
13. U.G.C. Grantee-Professor, University of Mysore, 1965-68.
14. Fiscal Consultant, Economic and Scientific Research Foundation, New Delhi, 1969-70.
15. Fellow, Royal Statistical Society, Since 1930.
16. Hon. Member, Canadian Tax Foundation, since 1954.

Dr. Gopal has written 23 books and over 100 papers on economics, history, education and research methodology. They include :

1. *Tipu Sultan's Mysore—An Economic Study* (1971)
2. *The Wealth Tax in India—Its Burden and Impact* (1970)
3. *Aspects of Indian Economic Policy* (1967)
4. *The Evolution and Basis of Indian Industrial Policy* (1967)
5. *Research Reporting in Social Sciences* (1965)
6. *An Introduction to Research Procedure in Social Sciences* (1964)
7. *Studies in Indian Public Finances* (1963)
8. *Techno-Economic Survey of Himachal Pradesh* (1962)
9. *The Finances of Mysore State* (1960)
10. *A Realistic Tax Structure for India* (1959)
11. *Financial Policy of the Indian Union* (1959)
12. *The Theory of Excess Profits Taxation* (1947)
13. *Basis of Public Salaries* (1946)
14. *Mauryan Public Finance* (1935)
15. *Finances of Mysore* (1940)
16. *The Structure of Permanent Excess Profits Tax* (1940)
17. *The Trend of Profits—A Factual Analysis* (1939)
18. *The Fiscal Policy of the Government of India* (1982)
19. *Sources of Economic History of Mysore* (1982).

Compiler

GOSBANK (*Monetary economics)

In the Soviet Union there is only one Commercial Bank. It is called Gosbank (the State Bank).

Compiler

The Gosbank has 5,500 offices throughout the country. It can oversee all transactions through its monetary control. It is with the credit plan the Gosbank is concerned. The Gosbank is even more than a central

bank. It has absolute control not only on the quantity of bank credit but also of the physical operation of industry itself. It is in this sense a general overseer for the government of the whole operation of the economy. The bank acts also as fiscal agent for the government, receiving all taxes and making payments. It is also responsible for all foreign exchange transactions.

W. W. Haines

GO-SLOW TACTICS (*Economics of labour)

Also called "working to rule" it is an alternative to the strike, in which the labourers work more slowly than usual.

Compiler

GOSPEL OF MAMMON (*Economics)

Mammon is the Greek God of riches and "gospel of Mammon is the derogatory epithet applied to political economy by the sharp tongued social critics viz , Thomas Carlyle, Matthew Arnold and John Ruskin. Paradoxically, the economists have died poor barring David Ricardo, Lord Keynes and a few others and of course the Nobel Laureats in Economics. Anyway, the condemnatory appellation stands rejected because economics tells not how to become rich but how to achieve maximum social and individual welfare from the scarce resources.

Compiler

GOSPLAN (*Economics of planning)

The State Planning Commission of the U.S.S.R. It has branches in all fifteen Republics of the U. S. S. R.

Compiler

Gosplan is the abbreviated name of the Gosudarstvennaya Planovaya Kommissiya Pristo or the State Planning Commission of the Council of Labour and Defence which was instituted by decree of the Russian Government (the Council of People's Commissars of the R. S. F. S. R. on February 24, 1921. Its parent body the STO or the Council or Labour and Defence is the supreme economic general staff. Gosplan is an advisory Commission of experts, subordinate to the STO. Its function is the drafting of plans for the future economic development of the Soviet Union along Socialist lines.

Five-year plan was introduced only in 1928 after the ground had been prepared by the economic policy of the preceeding eight years.

Gosplan is purely an advisory body. It passes judgment on the plans of all economic departments and tenders that judgment directly to the highest organ of the economic sphere—the STO—by whose decisions the recommendations of the Gosplan become executive orders.

International Encyclopaedia of Social Sciences

The Gosplan is headed by the Chairman who is a member of the Council of Ministers. Besides the Chairman, there are twelve Deputy Chairmen each of whom controls two or three divisions. The Gosplan comprises about 20 members who do not at once hold any ministerial charge. The members are specialists in different fields of the economy.

A. B. Bhattacharya

GOSSEN, HERMANN HEINRICH (1810-58) (*History of economic thought)

Distinguished German economist. Born at Duren near Aachen, Gossen had strong inclination for mathematics but his father compelled him to study law. While at university he became interested in economics and it seems he was influenced by Bentham. After the death of his father in 1847, he devoted himself entirely to economic studies.

His only work *Entwicklung der Gesetze des menschlichen Verkehrs und der duraus fliessenden Regeln fur menschliches Handeln* (1854) was hardly noticed and he shortly before his death ordered the destruction of the complete edition. The book was discovered by R. Adamson of Manchester and the discovery was made public by Jevons in the preface to the second edition of his *Theory of Political Economy* (1879) in which he frankly admitted that Gossen had "completely anticipated him as regards the general principles and method".

His most important contribution is a clear formulation of what later came to be called the principle of marginal utility and its application to problems of value and price. His main theses have become as the three laws of Gossen. (See below—Compiler)

Gossen used many simple algebraic formulae and two-dimensional diagrams.

Friederich A. Von Hayek

The first generation of modern marginal-utility theorists consists of the celebrated trinity, Jevons, Menger and Walras. But there is at least one another author whom one is obliged to mention in company with them—Gossen. He is an anticipator rather than a forerunner. His only book exercised no influence in his own life time. It remained completely ignofed for many years. Its first edition of 1854 sold very few copies and the embittered author had the book withdrawn. Only after its rediscovery in the seventies, and the praise which it subsequently earned from Jevons and Walras, was it reissued in 1889. Since then Gossen has not only been recognized as a poineer, but his theorems have influenced economic thought after their basic ideas had been made known by others.

Gossen's analysis of the laws of human conduct is characterized by these features ; determined utilitarianism, a consumption approach, and mathematical method. He held that it was impossible to determine economic results without the aid of mathematics. He begins by stating

that the aim of all conduct is to maximize enjoyment. From everyday observation Gossen derives certain laws of human enjoyment which are known as Gossen's laws.

Gossen's work is nothing, but an elaboration of these laws. Gossen's book contains the main elements of the Jevonian and the Austrian theory. Even the geometric and algebraic apparatus is there.

Eric Roll

Justice demands that some attention be paid to the unlucky who, in the history of any subject, make their discoveries too early to win the approval of their contemporaries. There are many anticipators of marginal analysis. Three major names were Cournot (1801-77), Thunen (1783-1850)and H. H. Gossen.

Gossen completely described utility as the basis of value although he did not extend his conclusions to the explanation of exchange. He advanced two original laws, both familiar parts of demand theory today. (See Gossen's laws below – Compiler) When Jevons identified Gossen as his predecessor, he accorded him no more than justice. Walras spoke of Gossen in extravagant terms : "Gossen claimed the glory of Copernicus, which is due to him because of his concept of the mathematical equilibrium of the economic world. In my opinion, he combines the glory of Copernicus with that of Newton because of his solution of the social question".

Robert Lekachman

GOSSEN'S FIRST LAW (*Theory of value)

It states that the amount of satisfaction derived from consumption decreases with each additional unit of the same commodity until it reaches zero or the point of satiety.

Friedrich A. Von Hayek

The amount of one and the same enjoyment diminishes continuously as we proceed with that enjoyment without interruption, until satiety is reached.

H. H. Gossen

Marshall's Law of satiable wants (i.e. Law of Diminishing Marginal Utility) is called in honour of the most important forerunner, Gossen's First Law.

J. A. Schumpeter

GOSSEN'S SECOND LAW (*Theory of value)

In order to obtain the maximum sum of enjoyment, an individual who has a choice between a number of enjoyments, but insufficient time to procure all completely, is obliged, however much the absolute amount of individual enjoyments may differ, to procure all partially, even before

he has completed the greatest of them. The relation between them must be such that, at the moment when they are discontinued, the amounts of all enjoyments are equal.

H. H. Gossen

Gossen's second law stated in cumbersome way refers to the manner in which the maximum of all enjoyments can be achieved. It stated the principle that maximum pleasure will result from a level of want-satisfaction.

The second law follows from the first and from additional postulate that it is impossible to obtain full satisfaction of all wants.

Eric Roll

It states that if it is impossible to gratify all wants to the point of satiety it is necessary in order to obtain maximum satisfaction of different wants at the point at which their intensity has become equal.

F. A. Von Hayek

Gossen's second law is a statement of the law of equi-marginal utility.

Compiler

Unlike the First Law of Gossen, the second Law is not a postulate, but a theorem ; in order to secure a maximum of satisfaction from any good that is capable of satisfying different wants (including labour or money), an individual (or household) must allocate it to these different uses in such a way as to equalize its marginal utilities in all of them.

At first sight both statements i.e. Gossen's First and Second Laws, are nothing but somewhat technical renderings of sad trivialities. But we must not forget that the proudest intellectual structures rest on trivialities that are entirely uninteresting in themselves. What could be more trivial than that a body at rest will remain at rest unless something (a 'force') acts to set it in motion (Nowton's First Law).

Joseph A. Schumpeter

GOVERNED ECONOMY (*Economics of development)

An alternative name for mixed economy.

See *Mixed Economy*.

Compiler

GOVERNMENT (*Public finance)

The term covers all public authorities.

Miles Fleming

GOVERNMENT BORROWING (*Public finance)

It often stands for an excess of Government spending over tax-collection combined with borrowing from the public equal to this difference.

Abba P. Lerner

GOVERNMENT EXPENDITURES (*Public finance)

Government purchases of goods and services, transfer payments, and net government interest.

W. W. Haines

GOVERNMENT FINANCE (*Public finance)

Another term for "public finance".

See *Public Finance.*

Compiler

GOVERNMENT NOTES (*Monetary economics)

Government's promise to pay standard money or some other kind of money to the bearer.

Fairchild, Buck and Slesinger

GOVERNMENT SECTOR (*Economics of development)

(i) All bodies, legislative and judicial, as well as executive, that are established through political processes including both central government bodies with compulsory powers extending over the whole territorial area of a country and bodies at lower levels with similar though more limited powers extending over a part of the area and (ii) all agencies directly answerable for their actions in particular actions connected with the receipt and expenditure of money to the bodies covered by (i).

U. N. Department of Economic and Social Affairs

GOVERNMENT SECURITIES (*Public finance)

Treasury bills and funded stocks.

Compiler

GOVERNMENT TRANSFER EXPENDITURE (*Public finance)

These are the expenditures of the Government, which consist in payments made either gratuitously or in purchase of existing property rights to private persons. They include expenditures on the payment of interest on Government debt, pensions, sickness benefit (as paid in money) and unemployment benefits ; also subsidies on the production of particular kinds of commodities, sugar, milk, meat or houses ; also payments made in the redemption of government debt, i.e. the repurchase of Government securities.

Alvin Cecil Pigou

GOVERNMENT'S FISCAL POLICY (*Public finance)

It is made of three parts : its policy relative to its purchases of goods and services ; its tax policy and its policy relative to transfer payments. (See also *Fiscal Policy*—Compiler)

L. V. Chandler

GRADING (*Agricultural economics)

The sorting of products as the kind, quality and size.

G. W. Forster and M. C. Leager

GRANTS-IN-AID (*Public finance)

Contributions from governments at one level to governments at a different level. They are made from funds to which the grantor has title and therefore do not include distribution of revenue collected by one government for another.

Philip E. Taylor

The term is English in origin.

A sum of money assigned by a superior to an inferior governmental authority either out of the exchequer of the former or out of sources of revenue specifically designated. They are given to overcome the poverty of local authorities.

International Encyclopaedia of Social Sciences

The system of grants-in-aid implies that the federal government hands over a certain portion of its revenue to some state governments or all state governments as a general aid or to compensate them for loss of revenue resulting from the federalisation of certain taxes previously levied by these states.

A.B. Das and M.N. Chatterji

In India grants-in-aid which are non-repayable, are granted by the Union Government to State Governments and Union Territories in accordance with recommendations made by the successive Finance Commissions.

Compiler

GRATUITY (*Economics of labour)

Sometimes known as a Lump-sum, it is an amount payable under some pension schemes at the time when the pension is due to commence. It is not liable to income tax.

J.L. Hanson

GRATUITOUS COINAGE (*Monetary economics)

In a system of free coinage if no fee is charged by the government for the working of mintage, the coinage is called gratuitous.

Rajnarain Mathur

GREAT DEPRESSION (*Business cycles)

The world-wide depression that started in 1929 and lasted till 1935. It was characterised by abysmally low economic activity and mass unemployment.

But for Great depression there would have been no Roosevelt's New Deal and Lord Keynes would not have written *General Theory of Employment, Interest and Money* (1936) that completely reoriented and revolutionised the current economic thought.

Compiler

GREATER THAN UNITY ELASTICITY OF DEMAND (*Theory of value)

If the total amount spent increases with a decline in price or decreases with a rise in price, elasticity of demand is greater than unity; the demand is elastic.

Albert L. Meyers

GREAT LEAP FORWARD (*Economics of planning)

A phrase applied to spectacular progress achieved in 1958 in all the sectors of the Chinese economy. It was a big leap unparalled in the economic history of China. Said the late premier Chou En-lai, "Such economic development could never be achieved under the capitalistic system."

Compiler

GREENBACKS (*Monetary economics)

The United States notes issued during the Civil War, 1861-65, as fiat currency.

Compiler

The Act of February 25, 1862 (U.S.A.) authorised the Treasury to issue $ 150 million of non-interest bearing notes (henceforth known as Greenbacks) to meet currency expenditures. These new notes which were to be issued in denomination of not less than five dollars were made legal tender for all private and most public purposes. They were not directly redeemable in gold in 20 years or callable at the time after five years.

A second issue of $ 150 million of greenbacks was authorised in July 1962. A final batch of $ 150 million was authorised by legislation adopted in January-March 1863. In the second batch denomination varied between one and five dollars and in third one dollar or more.

Raymond P. Kent

GREEN REVOLUTION (*Agricultural economics)

A name applied to high yielding variety (HYV) programme in the cultivation of wheat, rice, maize etc. It presupposes the change in the whole technique of fertilizing, of cultivating and of production. Prof. Samuelson observes: "The Green revolution of new wheat and rice cultivation in recent years seems to have been more labour-saving than land-saving. The Asian peasants have not done so well as the owners who have access to irrigation and fertilizer".

Mr. U. Thant, the then U.N. Secretary General, warned on December 5, 1969 that green revolution might prove to be a pandora's box rather than a cornucopia unless the developing countries immediately introduced land reforms as a follow-up measure. The U.S.A.I.D. expert Mr. Francine Franknel observed that green revolution would make the rich farmers richer and the poor farmers poorer. However, green revolution has ushered in an era of self-sufficiency in food grains in developing countries.

In India the term green revolution is rather a misnoner in that it is confined only to wheat cultivation and that too in the Punjab.

Green revolution is the monumental achievement of Dr. Norman E. Borlaug, the U.S. agricultural expert who won the 1970 Nobel Peace Prize. The prize was awarded "for his pioneer work in developing high-yielding strains of wheat that has helped to usher in the Green Revolution in India and other developing countries."

Compiler

GRESHAM, SIR THOMAS (1519—79) (*History of economic thought)

An English merchant-banker. He is the famous author of what came to be called Gresham's law—"bad money drives good money out of circulation."

Compiler

Sir Thomas Gresham (1519-79) was a typical Englishman: the businessman who is just as much a public servant as he is businessman and who, though perfectly successful in looking after his own advantage, serves the state in ways that are beyond the competence of the more public servant. As a businessman, he was a mercer, banker, entrepreneur (paper-milling), and public benefactor. As a public servant he was first 'factor' (fiscal agent) for the English Crown in the Netherlands—keeping up its credit, managing the course of the English exchange, negotiating loans, acting as a buyer of war materials, getting hold, by hook or by crook, of bullion to ship to England, and so on—and then, at home exchange dictator (Royal Exchanger) and Financial expert to Queen Elizabeth I—among other things, forcing merchants to lend to the Crown by methods that were akin to holdups which were so handled as to enhance instead of anninilate public credit.

We may note two analytical achievements that have been placed to his credit. First, he described correctly enough the rules that apply to the movements of the rate of exchange with reference to the specie points and he holds priority over Davanzati. Second there is Gresham's Law.

J.A. Schumpeter

GRESHAM'S LAW (*Monetary economics)

The proposition that if coins containing metal of different value enjoy equal legal tender power, then the 'cheapest' ones will by used for payment, the better ones will tend to disappear from circulation or, to use the usual but not quite correct phrase, that had money drives out good money.

This phrase occurs in the Royal proclamation 'decrying' base silver coin in 1560, when Gresham is known to have been the Government's chief adviser in such matters. There is also a memorandum of his (1559) which argues this case. The so-called 'law' can be found in many earlier writings. Considering its trivial nature, the question of priority is, however, without interest.

J.A. Schumpeter

An inferior currency, if not limited in quantity, will drive out the superior currency.

Alfred Marshall

If two kinds of money are in circulation, and if they are declared to be of equal value by the government while they are of different values in the domestic or foreign market, the kind that is overvalued by the government will tend to drive the kind it undervalues out of circulation.

Raymond P. Kent

'Cheap money' drives out 'dear' money.

Raymond Bye

Bad money (debased, worn or overvalued coins or irredemable paper currency) tends to drive good money out of circulation.

W.W. Haines

When two or more kinds of money of unequal value are in concurrent circulation, each being available for payments, the inferior tends to drive the better out of circulation.

Fairchild, Buck and Slesinger

Sir Thomas Gresham advised Queen Elizabeth I to undertake a restoration of the currency, explaining how her father Henry VIII's debasement had driven fine gold out of the country on the strength of his

exposition of the fact that "bad money drives out good". This principle has been called Gresham's law since H.D. Macleod introduced the usage in 1858.

International Encyclopaedia of Social Sciences

Gresham was by no means the first to make the statement. Oresme in 1364 had made similar statement. Even as early as 5th century B.C. the rough mention of the law is found in Aristophane's *Frogs*.

Compiler

GROSS BARTER TERMS OF TRADE (*International economics)

They relate to the total money value of exports as compared with the total money value of imports, but both totals are obtained by correcting the crude figures by the relevant price index in order to eliminate changes due merely to a change in the price level of exports or imports.

Gottfried Von Haberler

The 'net' and 'gross' barter terms of trade are the concepts developed by Taussig. By gross terms of trade, Taussig means the establishment of terms of trade by comparing not the prices of export goods and import goods, but the total value of a country's exports with total value of a country's imports.

T.N. Sachdev

GROSS BUSINESS SAVING (*Industrial economics)

It is composed of capital consumption allowances and undistributed net profits.

L.V. Chandler

GROSS DOMESTIC PRODUCT (*Economics of development)

The money value of all the commodities and services produced within a country during one year but excluding net income from abroad during the period. (The gross national product includes income from abroad).

Compiler

GROSS DOMESTIC PRODUCT AT FACTOR COST (*Economics of development)

Gross domestic product minus indirect taxes paid by firms plus subsidies.

Compiler

GROSS INTEREST (*Theory of value)

The pre-tax amount of interest receivable on investment.

Compiler

GROSS INVESTMENT (*Industrial economics)

Net investment plus reinvestment.

Gottfried Von Haberler

GROSS NATIONAL EXPENDITURE (*Public finance)

Gross national product. The sum of personal consumption expenditures, gross expenditures for investment goods in the private economy, net foreign investment and government purchases of goods and services.

Philip E. Taylor

The sum of all 'final' expenditures in any year by the residents of a country consisting of consumer's expenditure (C), public authorities' current expenditure on goods and services (G), gross capital formation at home (I), and the difference between exports (E) and imports (M). When these expenditures are shown at market prices, it is necessary to deduct indirect taxes *minus* subsidies (Tg).

F.S. Brooman

GROSS NATIONAL INCOME (*Economics of development)

Sum of incomes earned by the owners factors of production in any year.

F.S. Brooman

GROSS NATIONAL PRODUCT (GNP) (*Economics of development)

The sum total of goods and services produced in the country during the year.

Frederic Benham

The money value of all the final goods and services produced during a given period.

Dudley Dillard

Sum of gross investment (in fixed capital and inventories) and consumption.

Michael Kalecki

Gross national product or expenditure is the market value of the output of goods and services by a nation's economy during a stated period of time before deduction of depreciation charges and other allowances for business and institutional consumption of durable capital goods. It is usually stated at an annual rate.

Lester V. Chandler

In money terms the gross value of the final product of an economy's productive activity over a specified period, normally a year.

P.T. Ellsworth

The value of all goods and services produced annually in the nation.

Charles L. Schultze

It may be defined formally as the money value at market prices of all final goods and services produced by the residents of a country in course of a year.

Sam Rosen

The sum of expenditure for output in the form of personal consumption, gross private domestic investment, net foreign investment and government purchases of goods and services.

$Y=C+I+G$

Y=GNP where

C=personal consumption

I=total gross investment i.e. the sum of gross private investment and net foreign investment.

G=Government purchases of goods and services.

The concepts of GNP, NNP and National Income were originally developed by the National Bureau of Economic Research of the U.S.A.

Alak Ghosh

The market value of all commodities and services produced by an economy in a given period of time (usually one year). It includes not only the products of business but also the output of Government in the form of national defence, police protection, schools, roads etc.

Walter W. Haines

It is best defined as the sum of the following aggregates:

(a) Personal consumption expenditure,
(b) Gross private domestic investment,
(c) Net foreign investment,
(d) Government purchases of material goods and services

Raymond Bye

The sum of 'Values added' by the various industries and activities of the economy. It is valued at factor cost as contrasted with market prices.

F.S. Brooman

Gross national product purports to measure the total of all goods and services produced each year in a nation.

According to one concerned member...........of the New Left, GNP Stands for Gross National Pollution.

One of the most important concepts in all economics is the national income—or, technically, the gross national product (GNP). This measures the economic performance of the whole economy.........society does not live by G.N.P. alone.

Gross national product is defined as the sum of final products such as consumption goods and gross investment (which is the increase in inventories plus gross births or production of buildings and equipment). GNP=NNP+Depreciation.

Paul A. Samuelson

GROSS PROFITS (*Industrial economics/Theory of value)

All gains made by enterprisers in the conduct of their business.

Raymond Bye

Total profit before (business) expenses are deducted. On a single article gross profit is equal to sale price minus purchase price (of the seller) no account being taken of the selling costs.

Compiler

GROSS REVENUE (*Theory of value)

The market value of the final commodities produced during a particular time period.

G.M. Meier and R.C. Baldwin

GROSS SALES (*Industrial economics)

The amount billed for the goods sold during the year.

George Soul

GROSS SAVING (*Economics of development)

The excess of gross income over consumption.

Dudley Dillard

GROSSEN BANKEN (*Monetary economics)

The name applied to the "Big Three" German commercial banks—the Deutsche Bank, Dresdener Bank and Commerzebank.

Compiler

GROUP (*Theory of value)

Edwar H. Chamberlin calls several firms whose markets are closely interwoven a "group". Though a group can be identical with an industry for some purposes, the connotation of the word is that an industry—in the everyday sense of the word—can consist of two or more groups of closely competing firms. Each firm in a group has a different product, and at the same time there are usually several different prices.

The group concept is unavoidably vague because it is hard to draw sharp lines between groups.

D.S. Watson

The firms which produce differentiated goods are collectively called 'a group'. The concept was introduced by E.H. Chamberlin in his famous *Theory of Monopolistic Competition* (1933).

The concept of 'Group' is peculiar to monopolistic competition. In this market situation, the products are neither exactly homogeneous as in perfect competition nor remote substitutes as in monopoly. The products are fairly similar and serve as close substitutes.

Compiler

GROUP BANKING (*Monetary economics)

As situation in which a holding company maintains stock ownership and control of two or more banks.

W.W. Haines

There are various systems of banking: (1) branch banking, (2) unit banking, (3) group banking and, chain banking.

Group banking consists of the ownership and operation of two or more banks directly or indirectly by a corporation, a business trust or an association. Usually, the group is organised around a 'key' bank which itself is controlled by a holding company.

In the U.S.A. as against 300 groups with more than 3,000 member banks in 1929, there were only 33 groups with only 387 member banks in 1945.

(Branch Banking refers to that banking system in which two or more banking offices are operated under single ownership and as a single institution. The system is widespread in Europe. Unit banking refers to that system of banking in which banking operations are carried on through a single office rather than through a network of branches under the control of a single bank. This system received impetus in the U.S. Chain banking is a form of group banking It refers to a system where two or more banks are controlled by a single person or group of persons through stock ownership of otherwise. The system developed in the U.S.)

Compiler

GROUP EQUILIBRIUM (*Theory of value)

In group equilibrium as distinguished from individual equilibrium, is explained how the equilibrium adjustment of prices and outputs of a number firms whose products though differentiated are close substitutes takes place. The group equilibrium is discussed by professor E.H. Chamberlin, the chief architect of monopolistic competition, by introducing

"uniformity assumption" ('heroic' assumption) and "symmetry assumption".

Compiler

GROWTH (*Economics of development)

Changes in economic data which occur continuously in the sense that the increment or decrement per unit of time can be currently absorbed by the system without perceptible disturbance.

G. Haberler

The word growth can have many meanings but most of us today understand by it the growth of national income. If refers to the aggregate national income of a country and not its per capita income.

J.K. Mehta

It is usually defined as a rise in real output or income per capita.

P.H. Taylor

(See also "*Economic Development*"—Compiler)

GROWTH ECONOMICS (*Economics of development)

A branch of economics. It deals with the history and technique of economic development or growth of nations.

Economic growth has been the central interest of contemporary economic analysis.

Compiler

GROWTHMANSHIP (*Economics of development)

The term perhaps popularized by the former President of America Mr. Richard Nixon, is a name applied to the emphasis cn economic growth to the exclusion or at the expense of other economic objectives and to the concentration on investment as the only or main source of economic growth.

Compiler

GROWTH MODELS (*Economics of development)

The growth models deal with causes, problems and possibilities of economic development.

The development theories can be broadly grouped as:

(1) The Classicial model, (2) the Marxian model, (3) the Neo-classicial model, (4) the Schumpeterian model, and (5) the post-Keynesian model.

In the Classical school, the leading representatives are Smith and Ricardo. In the Neo-classical school, the prominent development theorists are Marshall, Wicksell and Cassel. The major theorists in the post-Keynesian group are Harrod and Domar.

G.M.Meier and R.E.Baldwin

The important growth models are :

1. the Classical model (in this ideas of Smith, Malthus and Mill (and not Ricardo) are the most celebrated),
2. the Marxist model,
3. the Schumpeterian model,
4. the Harrod-Domar model, and
5. Hansen's model.

Benjamin Higgins

The Classical model of Smith and Malthus describes economic development in terms of fixed land and growing population. The Ricardo-Marx-Solow model stresses the deepening of capital. Schumpeterian model stresses on innovation.

P. A. Samuelson

Growth models or theories of economic development by identifying the constraints to economic development seek to determine the macro-variables for achieving steady and sustained growth of the economies.

A plethora of growth models have been expounded right from Adam Smith to the present. This need not surprise us because after all economics in the ultimate analysis is a study of economic growth. However, a disquieting feature of all the theories is that they being mostly preoccupied with advanced capitalist economies are hardly applicable to the countries which are embroiled in poverty. It is redeeming that the contemporary growth economists having discerned this snag in the existing theories, have been actively engaged in the construction of the Third-World Oriented growth theories. Unlike the pre-Keynesian theories, the modern theories are highly abstract, formal and mathematical.

Several Indian economists, notably V.K.R.V. Rao and P.R. Brahmananda, have made significant contribution in formulating Indian oriented growth therapy.

Compiler

GROWTH RATE (*Economics of development)

Sir Roy Harrod and others speak of a number of rates of growth. One is the equilibrium rate of growth, that is called by Harrod the warranted rate of growth. Then there is the natural rate (nature's equilibrium rate) of growth which in a sense is the capacity rate of growth. And (as a result of the combined effect of the forced tending to establish the warranted and natural rates) we have, in the third place, the actual rate of growth. This last is, in an important sense, real rate of growth.

J. K. Mehta

The term implies rate of growth of national income.

Compiler

GUARANTEE SAVINGS (*Monetary economics)

These are a cross between mutual and stock banks. They receive "special deposits" in addition to ordinary deposits. A stipulated rate of interest is paid to the general depositors and any surplus beyond this is distributed as dividend amongst the special depositors. The special deposits constitute a guarantee fund for the general depositors.

A. K. Basu

GUARANTEED JOBS (*Economics of labour)

Programme guaranteeing jobs for all those able, willing, and seeking to work.

Paul A. Samuelson

GUARANTEED WAGE (*Economics of labour)

A type of wage-guarantees. It is an arrangement whereby an employer guarantees in advance, that for a specific period he will pay a predetermined amount to his workers whether or not there is work for them to do.

V. V. Giri

GUESS PLANNING (*Economics of planning)

It is described by many, as wish planning or dream planning. When undue expansion and development is wished against all odds, it is said to be guess planning and wish planning. Over-ambitious plan comes under this description.

A.B. Bhattacharya

GUILD SOCIALISM (*Economics of development)

That form of socialism which laid stress on the importance of industrialised self government and functional democracy. The Guild Socialists favoured workers, control as opposed to state management of industry.

In economic theory, guild socialism was predominantly Marxist. The writings of the guild socialists are Marxist in tone. The protagonist of the early guild doctrine was the architect and former Fabian, A. J. Penty. He was supported by A. R. Orage with the collaboration of S. G. Hobson reformulated guild doctrine between 1912 and 1915 in the columns of the *New Age* of which Orage had become editor in 1907. It was not until 1915 that the guild movement assumed on organised form.

G. D. H. Cole, Bertrand Russel, R. H. Tawney and many others were the members of the National Guild League.

International Encyclopaedia of Social Sciences

It, as advocated by Taylor, and G.D.H. Cole is an attempt to reconcile revolutionary Marxism and Syndicalism. One of its conditional

principles is that the state should be retained in society as a co-operative force with a definite economic function.

It is mainly a doctrine of economic monism, according to which society is organised into autonomous decentralised producers and professional units on a functional basis.

V. V. Giri

HABERLER, GOTTFRIED VON (B. 1900) (*History of economic thought)

A world-famous Austrian-born American economist. His eminence is more or less on par with other distinguished Austrian economists, viz., Menger, Bohm-Bawerk, F. Von Wieser, Schumpeter, Ludwig Von Mises, Hayek and Machlup.

Professor Haberler (DR. RER. PL., D. IVR) of Harvard University was born on July 20, 1900 in Purkersdorf near Vienna and came to the U.S. in 1936 to settle. Since then he was professor of economics at Harvard University till retirement. He studied at the Universities of Vienna, London and Harvard. Before joining Harvard, he taught at Vienna University. He was associated with the Board of Governors of the Federal Reserve System (U.S.A.) and other important bodies. He was elected the President of the International Economic Association in 1950-51 and the National Bureau of Economic Research in 1955. In 1963, he was elected the President of the American Economic Association.

Professor Haberler, an authority on international trade and business fluctuations, has written in German, besides numerous brilliant articles in learned journals, (i) *The Theory of International Trade with Its Applications to Commercial Policy* (1933) and (ii) *Prosperity and Depression* (1937). Both of the books having turned master-pieces sold like hot-dogs. Since their publication they have gone through several editions and been translated into a number of languages including English.

Haberler a convinced free trader is like Taussig and Viner a staunch modern exponent of the Classical theory of international trade. He has restated the theory of comparative cost in terms of opportunity cost. His theory has come to known as opportunity cost doctrine of international trade. When Bertil Ohlin and Mason held that Ricardo's analysis of international trade was vitiated by its dependence on an obsolete theory of value, Haberler showed that the principle of comparative costs admitted its restatement in terms of opportunity costs. He vehemently criticised the Prebisch-Singer thesis of deterioration of terms of trade of developing countries.

Haberler has carried forward and popularised the distinction between statistics and dynamics. He applied the method of dynamics to national income analysis. To him the theory of interest still remains a weak spot in economies.

Compiler

HAGGLING (*Theory of value)

Also Known as higgling, it is the process whereby a final price is arrived at for a transaction when there is direct and keen bargaining between a buyer who begins by offering a price he is prepared to raise and a producer who begins by asking a price he is ready to lower. The final price is set by the relative bargaining power of the buyer and seller.

Haggling takes place in the case of such commodities (i.e. antiques, second-hand goods and brand-new products) as have no developed markets in which equilibrium prices are established.

Compiler

HALSEY SYSTEM (*Economics of labour)

A sub-type of premium bonus system. Under the system which is alternatively called Weir system, the bonus is half the hourly rate for the time saved.

Compiler

HAMILTON, ALEXANDER (1757-1804) (*History of economic thought)

The American founding father of the doctrine of protectionism as opposed to free trade. His famous "Report on Manufactures" (1791) which contains the proposals on protectionism, is the earliest exposition of the theory of protection in its modern form. In this Report, Hamilton, a founding father of the American Republic and the spokesman of the conservative of Federalist party, strongly advocated protection for the struggling American industries so as to achieve the growth of industries, greater variety of employment, greater enterprise, security of the nation and so on.

The Hamiltonian method which was applied to the objectives of president Thomas Jefferson, was a veritable death-knell to the policy of free trade. Soon Hamilton's sneeze resulted in international pnuemonia: Henry C. Carey and Frank Taussing in America, Friedrich List in Germany and J.S. Mill and Marshall in England and many other orthodox political economists (the most outspoken among these are List and Carey) blessed the Hamiltonism. Such is the influence of Hamilton that to-day the conventional free trade having melted, protectionist policy is ruling supreme everywhere including the countries which were the cradle of *laissez faire*.

Born in the island of Nevis, Hamilton became a clerk at 12 and left for New York at 15. He graduated in less than usual time from King's College (now Columbia University). During the American War of Independence he served as Personal Secretary to the Commander-in-Chief. After the war, he studied law and joined the Bar. At the age of 30, he was appointed the first Secretary of the Treasury. He submitted to the Government the immortal "Report on Manufactures" on December 5, 1791.

Compiler

HAND-TO-HAND MONEY (*Monetary economics)

The term refers to all kinds of money in circulation other than bank deposits.

Raymond P. Kent

HAND-TO-MOUTH SOCIETY (*Economics of development)

A very poor economy where the inhabitants work from dawn to dusk and buy the night bread, in the evening.

Compiler

HANSEN, ALVIN HARVEY (B, 1887) (*History of economic thought)

One of the greatest American economists of Twentieth century. He is described as "the American Keynes".

Born of Niles and Bergita Mary at Viborg (S.D.) on August 23, 1887, Hansen did his B.A. from Yankton College in 1910, and M.A. from the University of Wisconsin in 1915. He was awarded Ph. D. in 1918 and LL.D. in 1936. He married Mabel Lewis on August 25, 1916. The Hansens have two children—Marian Grace and Mildred Jean.

Professor Hansen, who died recently, had a picturesque career. He served as Principal of High School, Lake Preston, 1910-12; Superintendent, 1912-13; Assistant Instructor in Economics, University of Wisconsin, 1915-16 and Brown University, 1916-19; Associate Professor of Economics, University of Minnesota, 1919-23; Professor, 1923-37; Lucius N. Littauer Professor of Political Economy, Harvard University, 1937; Professor Emeritus; Visiting Professor of Economics, Bombay University, 1957-58; Director of Research; Secretary, Commission of Inquiry on National Policy in International Economic Relations, 1933-34; Economist, State Department, 1933-35; Economic Adviser Prairie Province before Canadian Royal Commission in Dominion-Provincial Relations, 1937-38; Member, Advisory Council on Social Security, 1937-38; Chairman, Economic Advisory Council, National Industrial Confernce Board, 1938-39; Chairman, U.S.-Canada Joint Economic Commission, 1941-43; Special Economic Adviser, Federal Reserve Board, 1940-45, and Guggenheim Fellow, 1928-29.

Hansen, a paragon of Scholarship was the recipient of Francis A. Walker Gold Medal of the American Enonomic Association, 1967 and Gold Medal, King of Sweden, 1964. He was elected the President of the A.E.A. in 1938 and Vice-President of the American Statistical Association in 1937. He was the Member of the Royal Economic Society, Econometric Society and Social Science Research Council. He was the Associate Editor of *Econometrica* from 1933 to 1938. He was also on the Board of Editors, *Quarterly Journal of Economics*, 1947-48; *Review of Economic Statistics*, 1938 and *Inter-American Economic Affairs*, 1947.

Professor Hansen's contribution to economic theory and policy is rich and varied. Through his numerous books and articles he has exerted profound influence on economic thought and affairs of the world. His

most important works are:

1. *Business Cycle Theory* (1927)
2. *Full Recovery or Stagnation* (1938)
3. *Economic Policy and Full Employment* (with P.A. Samuelson) (1947).
4. *Economic Analysis of Guaranteed Wages* (1947)
5. *Monetary Theory and Fiscal Policy* (1948)
6. *Fiscal Policy and Business Cycles* (1949)
7. *Business Cycle and National Income* (1951)
8. *A Guide to Keynes* (1953)
9. *The American Economy* (1957)
10. *The Economic Issues of the 1960's* (1960)
11. *The Dollar and the International Monetary System* (1965)

Dr. Hansen a specialist in business cycles, monetary economics, public finance, economic growth and Keynesian economics, founded the Keynesian School in the U.S A. His greatest and very controversial contribution is the theory of secular stagnation which is also termed as "growing deflationary gap" or "increasing unemployment". Elaborated between 1938 and 1941, the theory concludes that the capitalist economy will eventually reach a position of chronic unemployment and economic stagnation. F.D. Roosevelt's New Deal was linked with stagnation thesis the followers of which were labelled by George Terborgh as "Stagnationists" or "professional pessimists".

There are what are known as Hicks-Hansen Diagram and Hansen-Keynes version of the doctrine of under-consumption. Hansen developed the concepts of savings and investment and proved that they would not only equal but also will be in equilibrium. He made a thorough going study of national income and refuted Hayek's neutral money policy.

Hansen in his *Business Cycles* and *National Income* integrated the concepts of multiplier and acceleration and called the combined action the leverage effect. He has also applied dynamic method to national income. According to him "the business cycle is peculiarly a manifestation of the industrial segment of the economy from which prosperity or depression is redistributed to other groups in the highly interrelated modern society. Between 1865 and 1938 he found 18 trade cycles—seven major and the rest minor.

Compiler

HANSEN, BENT (B. 1920) (*History of economic thought)

Danish-born Swedish economist of international fame.

Born on August 1, 1920, Hansen (FIL.. DR.) was educated at the Universities of Copenhagen and Uppsala.

Hansen has worked as (1) Civil Servant, State Dept. Copenhagen, 1946; (2) Lecturer, Uppsala University, 1947-48, 1950-51 and Gothenburg 1948-50, (3) Reader, Uppsala, 1951-55; (4) Professor and Head, National Institute of Economic Research; Stockholm, 1955-64; (5) Consultant,

Institute of National Planning, Cairo, 1962-65. He has been Professor of Political Economy at the University of Stockholm (Sweden) since 1967 to the present.

Hansen's major publications are:

1. *A Study in the Theory of Inflation* (1951),
2. *The Economic Theory of Fiscal Policy* (1958),
3. *Foreign Trade Credits and Exchange Reserves* (1961),
4. *Development and Economic Policy in the UAR* (Egypt) (1965).

Compiler

HANSEN'S GROWTH MODEL OR STAGNATION THESIS (*Economics of development)

According to some, Hansen's (and Harrod's) theory is not a general theory of growth in that it is associated with the particular problem of "secular stagnation" in "mature economies" or the problem of maintaining steady growth in advanced industrialised societies. This argument is untenable, for Alvin Hansen's theory is in line with (plus new ideas) the theories of Marx, Classicists and Schumpeter.

Few economic theories have aroused such a storm of protest or have been so thoroughly and so widely misunderstood as Alvin Hansen's theory of "economic maturity or "secular stagnation".

The Hansen thesis maintained that, in the absence of appropriate monetary and fiscal policy, advanced capitalist countries are subject to chronic and increasing underemployment. It called for government intervention of a more continuous nature than did the prevailing concept of business cycles. Thus it raised more serious doubts as to the efficiency of private enterprise under conditions of *laissez-faire.*

George Terborgh in 1945 labelled those who accepted Hansen's thesis "stagnationists" and "professional pessimists". However, it is the most optimistic.

Now the policies Hansen recommended have been adopted by most Western countries.

Hansen's theory (1) provides a more complete theory of autonomous (long-run) investment, (2) recognises that chronic and growing gaps between potential gross national product (with constant prices) and actual gross national product can arise from acceleration or deceleration of the growth rates of basic factors influencing autonomous investment, and (3) puts empirical content into the model (in question) by applying it to a particular country at a particular time.

Benjamin Higgins

HARD CORE UNEMPLOYMENT (*Economics of labour)

Another name for structural unemployment.

Compiler

HARD CURRENCY (*International economics)

Currency which is in short supply in relation to the demand for it by other countries. Hard currency which serves as an international currency, is generally freely convertible into gold or other currencies of the world.

Compiler

Hard currencies are those which are "hard to get" or for which the demand exceeds the supply. They include currencies convertible into gold and currencies of countries mainly in the western Hemisphere and Switzerland, whose exports are in great demand.

Rollin G. Thomas

HARGREAVES JAMES (*Industrial economics)

The inventor of spinning jenny—a simple hand machine by means of which many spindles could be used simultaneously. This principal invention which forms a part of Industrial Revolution took place in 1770. It was one of the important inventions in the cotton textile industry, the others being "Arkright's frame" and "Crompton's mule".

Compiler

HARMONIC MEAN (*Statistics)

Harmonic mean of a series is the reciprocal of the arithmetic average of the reciprocals of the values of its various items.

The harmonic mean of 2, 4, and 8 would be equal to the reciprocal of $\dfrac{\frac{1}{2}+\frac{1}{4}+\frac{1}{8}}{3}$

Symbolically,

$$h = \text{reciprocal}\ \frac{\frac{1}{m_1}+\frac{1}{m_2}+\frac{1}{m_3}+\ldots\frac{1}{m_n}}{n}$$

where h stands for the harmonic mean, m_1, m_2, etc. for the values of the variable and n for the number of items.

Harmonic mean is one of the types of mathematical averages, the others being arithmetic mean, geometric mean, quadratic mean etc.

D.N. Elhance

HARMONY DOCTRINE (*Internatonal economics)

The thesis that the interest of the community is simply the sum of the interests of the members who compose it; each man, if left alone, will seek to maximise his own wealth; therefore, all men, if unimpeded will maximize aggregate wealth. Smith applying the doctrine argued that the general welfare is best promoted by removing all restrictions on imports and exports.

Mark Blaug

HARRIS, SEYMOUR (B. 1897) (*History of economic thought)

A noted American economist and political adviser.

Born on August 9, 1897, S.E. Harris, A.B., Ph. D. has served as (i) instructor, lecturer and professor of political economy at Harvard University; (ii) adviser to the late president Kennedy (iii) Managing editor and editor of *Review of Economics and Statistics*; (iv) Advisory editor of *Journal of Sociology of Education*; (v) Chairman of the Department of Economics and professor of economics at the University of California, and so on.

Dr. Harris, a Harvard product, is the proud author of over forty books. Some of his publications are:

1. *Economic Planning*, (1949),
2. *Saving American Capitalism* (ed.) (1948),
3. *The New Economics* (ed.) (1947),
4. *The Assignats*, (1930),
5. *The Economic Problems*, (1960),
6. *Economics of Kennedy Years*, (1964).

Compiler

HARROD, SIR (HENRY) ROY FORBES (1900-78) (*History of economic thought)

An internationally renowned versatile Keynesian economist of Oxford University (U.K.).

Born on 13th February 1900, Sir R.F. Harrod, Kt., F.B.A. received his education at Westminster School and New College, Oxford. He began his career as lecturer at Christ Church, Oxford and continued teaching there till 1952. He was Junior Censor during 1927-29, and Senior Censor during 1930-31.

He served as Member of :

(i) Hebdomedal Council, Oxford (1929-35),
(ii) Bodleian Library Committee (1930-31),
(iii) Press Section F. British Association (1938), and
(iv) Statistical Department in Admiralty (1943-45).

From 1946-61, he was the Joint Editor of *Economic Journal*. From 1940 to 1942, professor Harrod served under Lord Charwell and in the Prime Minister's office. In 1952 he was appointed as the Adviser to the International Monetary Fund, Washington D.C. During 1962-64 he held the coveted post of President of the Royal Economic Society. In 1952 he was also appointed Nuffield Reader of International Economics at Oxford University.

Sir Roy Harrod is honoured with Honorary Dr. of law and LL.D.

Professor Harrod is the proud author of:

1. *International Economics* (1933),
2. *The Trade Cycle* (1936),
3. *Are These Hardships Necessary* ? (1947),
4. *Towards a Dynamic Economics* (1948),
5. *The Life of Lord Keynes* (1951),
6. *And So It Goes On* (1951),
7. *Economic Essays* (1952),
8. *The Dollar* (1953),
9. *The Foundation of Inductive Logic* (1956),
10. *Policy against Inflation* (1958),
11. *The Professor* (*A Personal Memoir of Lord Charwell*) (1959),
12. *Topical Comment* (1961) (With D.C. Hauge),
13. *International Trade Theory in a Developing World* (1963),
14. *The British Economy* (1963),
15. *Reforming the World's Money* (1965),
16. *Towards a New Economic Policy* (1967),
17. *Dollar-Sterling Collaboration* (1968),
18. *Money* (1969).

Sir Roy Harrod's fields of interest in the realm of economics are varied and his contributions are numerous. Like Hicks and Marx, he is a terse and abstruse writer.

He expounded the celebrated theory of steady growth which having come to be called Harrod-Domar growth model has been the starting point for the contemporary (post-Keynesian) growth theories. (For the theory see *Harrod Domar Model of Growth*). Moreover, even to this day it has remained the most dominant among all the theories of economic development.

Harrod advanced his suggestions for reforming the ailing I.M.F. His suggestions, known today as Harrod's plan are as important as those made by Robert Triffin or Bernstein or Maxwell or Jacques Rueff. In his plan, Harrod rejected flexible exchange rates on the ground that such a policy would lead to cost-push inflation and advocated revaluation of gold. (For more details see *Harrod's Plan*).

His *Life of John Maynard Keynes* which propelled. professor P.A. Samuelson to nick-name Harrod as Keynesian expansionist is the single most comprehensive and authoritative book on Keynes's life and contribution to economics, notwithstanding the fact that it is somewhat idolatrous.

Though Keynesian like Hansen, Harrod demonstrated that Keynes's *General Theory* was a short run analysis, and within twelve year of the publication of the *General Theory* Harròd brought out his greatest work, *Towards a Dynamic Economics* (1948). Benjamin Higgins writes, "In contrast to much of the literature on 'dynamics', Harrod's *Essay* has the main attributes of a truly dynamic theory". The book is awefully tough not because it includes mathematics but it excludes mathematics. There

are whole paragraphs between the lines that reader must fill in for himself, an impossible task.

Harrod's definition of dynamics is widely accepted. According to him, dynamics is the study of an "economy in which the rates of output are changing". He says that dynamics has to do with "continuing changes generated by the special nature of a growing economy." Similarly his definitions of nuctral invention and incomes policy are standardised.

Compiler

HARROD-DOMAR MODEL (OF ECONOMIC GROWTH) (*Economics of development)

The most celebrated and illuminating of all the growth models expounded from the Classical days up till now.

Sir Roy Harrod of Oxford (U.K.) developed the theory in his "Essay in Dynamic Theory" published in *Economic Journal*, March 1939 and again in his pioneering *Towards a Dynamic Economics* which contains a course of lectures delivered by him at London University in 1947. Lecture three on "Fundamental Dynamic Theorems" contains the core of his theory of growth. Evsey Domar of America evolved the model in his *Essays in the Theory of Economic Growth* (1957). Even though Harrod and Domar published their ideas quite independently at different times, their models or equations are similar and give precisely the same conclusions. That is why their theories are referred to as Harrod-Domar model.

Though the models of Harrod and Domar are based primarily upon the experience of the industrially advanced stagnation-prone capitalist economies, they are found to be applicable, perhaps in a limited manner, to the underdeveloyed countries.

Both of the theories study the requirements of steady growth and are interested in the *required rate of growth* in income so as to keep the dynamic economy in the equilibrium path from the year to year.

Both of the models assign a strategic place to investment, for it plays the double role of generating income and augmenting the productive capacity of the economy by enlarging its capital stock. The first is the demand effect which operates through creation of additional income and the latter is the supply effect which works through the creation of additional productive capacity. Thus, the net investment originates income and the aim of a model is the balanced augmentation of income.

If economic growth is to take place, volume of *real income* and *output* should increase simultaneously and the productive capacity of the capital must be expanding; otherwise excess capacity will arise and force entrepreneurs to prune their expenditure on investment. The result of the imbalance would be a decline in income and employment.

Thus, employment in the long-run is a function of the rate of growth of investment and income. If unemployment is to be removed,

and secular stagnation (i.e. long-run disequilibrium in income) is to be averted, income should grow at a rate which is sufficient to ensure full capacity use of a growing capital stock (i.e. there should not be unused capacity in capital equipment.)

The required rate of growth of income may also be called warranted rate of growth or full-capacity rate of growth.

With this broad outline of Harrod-Domar model, we make an attempt below to present laconically the two models separately.

Harrod's growth model

Prof. R.F. Harrod expresses the rate of growth in an economy with the following equation:

$$Gw = \frac{s}{Cr}$$

Where,

Gw = warranted (required) rate of growth which Harrod defines as "that overall advance which if executed will leave entrepreneurs in a state of mind in which they are prepared to carry on a similar advance".

$s = \frac{\Delta S}{\Delta Y}$, i.e. marginal propensity to save out of a given income.

Cr = Value of capital required to produce an incremental unit of output (marginal unit of output), i.e. capital output ratio.

Harrod distinguishes between three types of growth rates, *viz.*, G (Actual rate of growth), Gw (Warranted rate of growth) and Gn (Natural rate of growth).

According to the above said equation, if there is to be full and continued utilisation of capacity, income must grow at the annual rate of $\frac{s}{Cr}$.

Harrod's theory of steady growth, contains the idea that economic growth is inherently unstable. This is due to divergence between the natural rate of growth and the actual (attained) rate of growth which in turn is on account of discrepancies in the entrepreneurial expectations.

Harrod's model is an extension of Keynesian theory of economic growth. Like Keynes, Harrod contemplates a world where (a) propensity to save $\left(\frac{\Delta S}{\Delta Y}\right)$ exceeds the inducement to invest, (b) stagnation, and (c) there is a deficiency in the aggregate effective demand.

Harrod in his model emphasises three points, *viz.*, (a) danger of productive capacity outstripping effective demand, (b) predominant role of induced investment, and (c) instability of progressive equilibrium.

Domar's growth model

Domar's equation is

$$\frac{Y'}{Y} = \frac{S}{K}$$

Let us see what it says and how it is deduced.

In Keynesian terminology, in equilibrium,

S (Savings)=I (Investment)

(i.e. Y=C+S; and Y=C+I; $\therefore$ S=I)

Where Y=national income,

C=total consumption

I =aggregate investment

In Domar's,

K stands for capital–output ratio.

Y represents income,

Y′ denotes increase in income per unit of time, and

Sy=saving out of a given income

$\therefore$ I=Sy

i.e. Investment=Marginal propensity to save out of a given income.

$$\text{Then } Y' = \frac{I}{K}$$

$$= \frac{Sy}{K} \text{(by substituting Sy for I)}$$

$$= y \cdot \frac{S}{K}$$

$$\therefore \frac{Y'}{y} = \frac{S}{K} \left(\frac{Y'}{y} = \text{the rate of increase in income per unit of time.} \right)$$

The implication of Domar's model is that (1) if there is to be full utilisation of the capacity and (2) if saving—investment equilibrium is to be fully maintained, Y′ will have to grow at the rate of $\frac{Sy}{K}$ (i.e. the rate which is equal K to the quotient of propensity to save divided by the capital output ratio).

Harrod's warranted rate of growth (Gw) is the same as Domar's rate of increase in income per unit of time $\left(\frac{Y'}{y}\right)$.

Compiler

Harrod's model of 1939 was 10 years later elaborated by J.R. Hicks so as to incorporate cyclical fluctuations within the growing economy.

P.W. Bell and M.P. Todaro

The Harrod-Domar models of economic growth based as they are on the experience of advanced economies, are primarily addressed to an advanced capitalistic eeonomy, and attempt to analyse the requirements of steady growth in such economy.

Harrod and Domar lay emphasis on the demand effect and supply effect of investment.

Domar builds his model around the question: since investment generates income on the one hand and increases productive capacity on the other, at what rate investment should increase in order to make the increase in income equal to the increase in productive capacity, so that full employment is maintained ?

Harrod who tries to show how steady (i.e. equilibrium) growth may occur in an economy, bases his analysis on three distinct rates of growth —G (actual growth rate) which is determined by the saving ratio and the capital-output ratio, Gw (warranted growth rate) which is the full capacity growth rate of income of an economy and Gn (natural growth rate) which is "the welfare optimum" or full employment growth rate.

M.L. Jhingan

HARVEST THEORY (*Bussiness cycles)

Another name for climatic or agricultural or sun-spot theory of business cycles.

See *Climatic Theory of Business Cycles.*

Compiler

HAWTREY, SIR RALPH GEORGE (B. 1879) (*History of economic thought)

An internationally reputed British authority on monetary economics. (He is dead now) He was often consulted by Lord Keynes.

Educated at Cambridge, Hawtrey entered the British Civil Service in 1903. After a distinguished and marathon career at the Treasury from 1904 to 1945, Hawtrey who is regarded as the father of scientific central banking, became professor at the Royal Institute of International Affairs and stayed there until his retirement in 1952. In 1928, he was for a year a guest lecturer at Harvard University.

His writings are not only prolific but of high calibre: Hawtrey's publications include:

1. *Good and Bad Trade* (1913),
2. *Currency and Credit* (1919),
3. *The Economic Problem* (1926),
4. *The Gold Standard in Theory and Practice* (1927),
5. *Trade and Credit* (1928)
6. *The Art of Central Banking* (1937),
7. *Capital and Employment* (1937),
8. *A Century of Bank Rate* (1938),
9. *The Balance of Payments and the Standard of Living* (1950),
10. *Cross Purposes in Wages Policy* (1955),
11. *The Pound at Home and Abroad* (1961),
12. *Incomes and Money* (1967)

Amongst his numerous significant contributions, the purely monetary theory of trade cycle is the best known and monumental. According to this controversial but sound theory, trade fluctuations occur due to misbehaviour on the part of the banking system. Hawtrey wrote: "Variations in effective demand which are the real substance of the trade cycle, must be traced to changes in bank credit .....The trade cycle is a monetary phenomenon because general demand is itself a monetary phenomenon."

Hawtrey ctiticised the Radcliffe Committee Report (1959) because he felt that it had not given sufficient attention to the possibility that the rate of interest had a considerable influence on a firm's willingness to hold stocks of commodities. According to Hawtrey, an economic problem is a monetary problem. He divided consumer goods into defensive goods and creative goods.

Hawtrey argued that a change in bank rate affected the general price level, income and employment through its influence on the short-term rate of interest. This was antithetical to Keynesian assertion that the influence was through the long-term rate of interest. The Hawtrey-Keynes controversy, like any other economic controversy has remained unresolved.

"The lender of the last resort"—one of the most important functions of the central bank is the innovational contribution of R.G. Hawtrey.

Compiler

HAWTREY'S THEORY OF TRADE CYCLE (*Business cycles)

Sir Ralph George Hawtrey's celebrated trade cycle theory which has the brilliant modern followers in J.B. Clark and F. Milton Friedman is designated as the purely monetary theory since according to it business cycle is purely a monetary phenomenon, an outright small-scale replica of money inflation and deflation.

According to the theory, prosperity and depression are caused by expansion of money supply and contraction of money supply respectively. Since the expansion and contraction of money supply are brought about through the expansion and contraction of credit money, the banking system is responsible for cyclical fluctuations.

Though the theory is plausible, it is partial in its explanation.

Compiler

HAYEK, FRIEDRICH AUGUST VON (B. 1899) (*History of economic thought)

The winner of 1974 Nobel Prize in Economics.

Born on May 8, 1899 in Vienna (Austria). F.A. Von Hayek, Dr. Jur., Dr. Rer. Pol. (Vienna) D.Sc. (Econ.) (Lond.) F.B.A. (England) is a leading member of Austrian School of Economics which is represented by great economists such as Bohm-Bawerk, Carl Menger, J.A. Schumpeter, Ludwig Von Mises, Gottfried Von Haberler, Morgenstern Fritz Machlup and Strigl.

Along with professar Gunnar Myrdal, Hayek was awarded the Nobel Prize for "pioneering work in the theory of money, economic fluctuations and important inter-disciplinary research".

Hayek was awarded Dr. Jur and Dr. Rer. Pol. by Vienna University in 1921 and 1923 respectively. After serving on Austrian Civil Service from 1921 to 1926, interrupted by graduate study at New York University in 1923-24, Hayek was appointed Director of Austrian Institute of Business Cycle Research in 1927. He stayed there till 1931. He served as Professor of Economic Science at the University of London (London School of Economics) from 1931 to 1950. Then he worked as Professor of social and moral science at the University of Chicago from 1950 to 1962. From 1962 to 1968 (when he retired), Hayek served as Professor of Political Economy at the University of Freiburg in Breisgu (West Germany). Thus, Dr. Hayek has a rare record of having taught at four countries of Austria, the U.S.A. the U.K., and Germany.

Hayek, a neo-libertarian (like M.Friedman of Chicago) is a prolific and provocative writer. His several main publications include:

1. *Monetary Theory and the Trade Cycle* (1929), (It was translated into English in 1933).
2. *Prices and Production* (1931),
3. *Monetary Nationalism and International Stability* (1937),
4. *Profits, Interest and Investment* (1939),
5. *The Pure Theory of Capital* (1941),
6. *The Road to Serfdom* (1944),
7. *Individualism and Economic Order* (1949),
8. *John Stuart Mill and Harriet Taylor* (1951),
9. *The Sensory Order* (1952),
10. *The Counter-Revolution of Science* (1952),
11. *The Political Ideal of the Rule of Law* (1955),
12. *The Constitution of Liberty* (1960),
13. *Studies in Philosophy, Politics and Economics* (1968),
14. *Law, Legislation and Liberty*, Vol.1 (1973),
15. *Law and Order*, Vol.II (1973),
16. *The Mirage of Social Justice*, Vol. III (1976).

Dr. Hayek is, like Ragnar Frisch, a great term inventor. He coined famous terms like Ricardian effect, Scientism and Neutral Money.

Hayek gave the immortal monetary over-investment theory of trade cycle. According to it, over-issue of bank credit at artificially low rate of interest is responsible for the emergence of the phenomenon of trade cycle. Observing the Wicksellian distinction between the natural rate of interest and the market rate of interest, he argued that so long as natural and market interest rates were equal, the economy remained (trouble free) in equilibrium. When the market rate of interest is less than the natural rate of interest, the demand for funds for purpose of investment exceeds

the available supply of savings. The gap between the demand for and supply of savings shall be filled in by the expansion of bank credit. The additional bank credit increases the supply of money which in turn increases the price level resulting in boom or inflation. The opposite happens when the market rate of interest is higher than the natural rate of interest.

Dr. Hayek defined economic planning as "a central direction of all economic activity according to a single plan, laying down how the resources of society should be consciously directed to serve particular ends in a definite way". In his *Road to Serfdom* which is a blistering attack on *planned economy*, Hayek argued out that planning led not to freedom but to serfdom and that planning was bound to lead to political dictatorship. He held that the pursuit of equality and the growth of planning would lead to a "regimented and cruel society". He identified planning with "collectivism, communism, Nazism and Fascism". Further he concluded that rational economic calculation was impossible in a planned economy.

According to him, in a competitive private enterprise where free markets prevail, individual businessmen seeking their own profit will make the decision which give the consumers what they (consumers) want at the lowest possible prices. Both producers and consumers are free. He warns that any mistake by a government authority is bound to be more serious than one made by an individual businessman, since the small competitor injures mainly himself by a wrong judgment, whereas a national authority injures everybody.

Hayek has criticized the objective of price stabilization which was advocated by economists of the brain of Keynes and Cassel. Hayek brandishes his sword and admonishes "It is high time that the influence of price stabilizers which has already done enough harm should be overthrown." He then himself develops the theory of "neutral money" according to which money should be controlled in such a way as its quantity in circulation does not affect the price level. He belives neither in price level concept nor in price index numbers.

Hayek emphasises circulating capital and not fixed capital.

To the predicament of Keynes, Hayek showed that a rising level of consumption would after a certain point, reduce rather than increase the rate of investment.

Compiler

HAYEK'S ADDITIONAL CREDIT THEORY (*Business cycles)

Monetary over-investment theory of business cycles propounded by F.A. Von Hayek.

See "*Hayek*" and "*Monetary Over-investment Theory*".

Compiler

HAZARI, R.K. (*History of economic thought)

An eminent Indian industrial economist.

Dr. R.K. Hazari, former professor of Industrial Economics at the University of Bombay, Deputy Governor of the Reserve Bank of India, and editor of *Economic Weekly* (now *Economic and Political Weekly*) is the author of the famous Report on Industrial planning and licensing policy. His *The Structure of the Corporate Private Sector* was the first systematic and detailed study of the organisation of Indian business houses.

Compiler

HEAVY VARIABLES (*Economics of development)

Population, capital stock and technology are termed as heavy variables.

Compiler

HECKSCHER-OHLIN THEORY (*International trade)

The modern theory of international trade. It was advanced in his 1919 article "The Effect of Foreign Trade on the Distribution of Income" by Swedish economist, E.F. Heckscher (1879-1952) and elaborated by his fellow-countryman and Nobel laureate Bertil Ohlin in his 1933 book "*Interregional and International Trade.*"

While according to the Classical comparative cost theory, international trade differed from intranational trade, the Heckscher-Ohlin theory considers international trade as a special case of inter-local or interregional trade.

The theory regards limited mobility of productive factors as the principal cause of trade, both international and interregional. It points to the geographical spreading of raw materials, the varying state of the soil, the differences in climatological conditions, and the varying quantity and quality of manpower and capital goods from area to area.

The unequal dispersion of the factors of production and the consequent inequality in remuneration determine which goods are most profitably produced in each country. A country with abundant and cheap labour does best to concentrate on labour-intensive production and to exchange the surplus of such production with other countries for goods that it has not manufactured itself.

Compiler

(Ohlin's theory may be summarised thus:)

Regional differences in factor equipment occupy the fundamental position in the explanation of interregional specialization and trade. Given such differences, factor prices will vary from region to region, which, in turn, means that commodity prices will differ. The establishment of commodity price differences provides the basis for interregional specialization and the exchange of each region's specialities for those of other localities.

P.T. Ellsworth

The Theory states that each region specialises in the production of those commodities for which it is best suited in terms of natural resources and factor equipment.

M.L. Seth

In modern times, the pure theory of international has been reformulated by two Swedish economists, Heckscher and Ohlin. The Heckscher-Ohlin theory explains the pattern of trade in terms of the relative factor endowments of countries: a country will tend to have a comparative advantage in those products which use intensively the country's relatively abundant factor of production and therefore to import products which use intensively the country's scarce factor.

This theory absorbs Ricardo's Law of comparative costs, supplemented by Mill's concept of reciprocal demand, but goes beyond it in linking the pattern of trade to the economic structure of trading nations.

Mark Blaug

HEDGING (*Industrial economics)

Betting in two opposite ways on the same thing.

Allen, Buchanan and Colberg

A practice which involves a simultaneous purchase (or sale) for immediate delivery and sale (or purchase) for future delivery.

Anatol Murad

A method by which wholesale dealers in basic raw materials and food-stuffs or manufactures of certain products can transfer risks of adverse price fluctuations to professional speculators in the commodity exchange.

It consists in the purchase of a commodity in the trade market simultaneously with a short sale of the same commodity or a closely related one in the futures market.

Raymond Bye

A technique of buying and selling so as to minimise the risk of loss due to price fluctuations. It is commonly used by commodity dealers and manufacturers, such as flourmillers, textile producers etc.

M.L. Seth

In foreign exchange, it refers to foreign exchange or foreign borrowing operation to safeguard against indefinite and indirect exchange risk arising from assets or liabilities whose value is apt to be affected by changes in exchange rates. According to an alternative definition, hedging is taking a speculative risk in order to offset a bigger speculative risk in the opposite sense.

Paul Einzig

HEDONISM (*Economics)

The doctrine that minimisation of pain and maximisation of pleasure are the ulterior objects of the calculus of economics.

Compiler

To secure the greatest amount of pleasure with the least possible outlay should be the aim of all economic efforts.

F. Quesnay

HEROIC THEORY (*Economics of development)

There are essentially two different theories of the process of invention: the heroic theory and the systematic theory.

According to the heroic theory, the credit for a particular invention belongs completely or mainly to one individual who has the unique inspiration. Thus the invention of the spinning mule is attributed to Crompton, of steam engine to Watt and so forth.

Heroic invention also called *spontaneous* invention can be explained only in terms of chance happenings, the curiosity of an individual inventor or what Taussig called the "instinct of contrivance".

G.M.Meier and R.E. Baldwin

HETEROGENEOUS OLIGOPOLY (*Theory of value)

It is characterised by the fact that the firms in a market differ and that they produce goods which are clearly differentiated one from the other.

Bo Sodersten

HETERONOMOUS SAVING (*Economics of development)

Preiser's term for investible funds due to higher profit.

Compiler

HICKS, SIR JOHN RICHARD (B. 1904) (*History of economic thought)

Born on 8th April, 1904 at Warwick in England, Sir John Richard Hicks is perhaps the greatest of English economists after Adam Smith, David Ricardo and John Maynard Keynes. He was along with Dr. Kenneth J. Arrow awarded the Nobel Prize in Economics in 1972, for his "pioneering contributions to the general economic equilibrium theory and welfare theory". No economist anywhere in the world working in the field of theoretical economics can afford the luxury of missing reference to Hicks. Hicks has been a great technologist, a stern methodologist and a relentless logician. Hicks, a distinguished theorist, has been making for the last 50 years contributions of first rank. He is, like Marshall, self-taught and necessarily more intuitive and heuristic. He is always concerned with novelties and not with old bottles. He always confines himself to those

aspects of each subject he treats on which he has something new to say. He deals with familiar aspects cursorily. He takes up always fundamental and the most complicated economic issues and not trivialities.

Like T.S. Eliot and Bertrand Russel, Sir J.R. Hicks is a terse, rigid and austere writer. He never dilates nor dilutes. To follow Hicks and to keep pace with him, one must have a thorough grounding in advanced economic theory, sophisticated mathematics, philosophy and other allied social sciences. What is captivating is that even though his writings are bewilderingly difficult, they are interspersed with Robertsonian and Samuelsonian wit, humour and punch Hicks at once combines in himself Smithian penetration, Ricardian abstrusion, Marshallian erudition and Keynesian capability of converting one's economic religion.

Hicks, an encyclopaedic genius, has left his indelible imprint not in one branch of economics but in many such as price theory (which is the most difficult and fundamental of all the branches of economics), economics of labour, econometrics, international economics, economics of growth, monetary economics, general equilibrium analysis, welfare economics, economic history and so on.

He is one of the very few lucky economists whose wives too have been celebrated economic scientists. His wife Ursula Hicks is perhaps the only woman specialist in the whole world in economics of public finance. (The other famous 'economic pairs' are Alfred Marshall and Mary Marshall, Joan Robinson and E.A.G. Robinson, and Sydney Webb and Beatrice Webb).

Like Lord Keynes Hicks is never content with the economic arguments he makes. He always revises his own economic thought. Hicks is an expert in handling the most complicated mathematical formulations. But if you have no liking for mathematics tell him and immediately he transcribes his mathematical presentation in literary economics without in any way impairing or abridging his original thoughts. It is remarkable that Hicks is one of those rare ecônomists who made their break-through before they attained the age of thirty years.

Career

Hicks, whose father was a journalist on a local newspaper, was educated on scholarship at Clifton College (1917-22) and at Balliol College, Oxford (1922-26). During his school days and in his first year at Oxford, he was a specialist in mathematics.

Not contented with mathematics, he developed interest in literature and history. However, in 1923, he moved to philosophy, politics and economics and finished with second class degree.

Economists in those days, as Hicks himself says, were very scarce and he picked up a temporary lecturership at the London School of Economics. He started as a labour economist doing descriptive work on industrial relations; but gradually he switched over to analytical side. He

found that his mathematics could be revised to cope with what was used in economics. In 1930, the department of economics at the London School got a new lease of life under Lord Robbins, the leader of the Modern English School of Economic Thought. In 1935, Ursula Webb became his wife. The same year, he took an University lecturership and fellowship of Gonville and Caius College. During his years at Cambridge (1935-38), he was mainly occupied in writing *Value and Capital*, his *magnum opus*. From 1938-45, he was professor at the University of Manchester. It was there he did his main work on welfare economics with its application to social accounting. In 1946, he returned to Oxford, first as a research fellow of Nuffield College (1946-52), then as Drummond Professor of political economy (1952-65) and finally as a research fellow at All Souls College (Oxford) (1965-71).

During these latter years, besides his original work in many fields of theoretical economics, he has also done some work mostly in collaboration with his wife, Ursula Hicks, on applied economics especially in relation to problems of developing countries.

In 1950, he was a member of Revenue Allocation Commission in Nigeria and in 1954, both Mr. And Mrs. Hicks made an enquiry into the finances of Jamaica.

The Hicks live in the country but spend a part of each week in Oxford where they continue to do a little teaching.

Hicks became fellow of British Academy in 1942; a foreign member of the Royal Swedish Academy in 1948, of the Academy dei Lincei, Italy in 1952 and of American Academy in 1958. He is an honorary fellow of Nuffield College, Oxford since 1958, and of Conville and Caius College, Cambridge since 1971. He was President of the Royal Economic Society (founded in 1890) from 1960 to 1962 and was Knighted in 1964. He is an honorary doctor of the Universities of Glasgow, Manchester, Liecester, East Anglia, Warwick and of Technical University of Lisbon. He was made in 1971 an honorary senator of Vienna.

Professor Hicks, a product of Oxford University and London School of Economics has the distinction of having taught successively at the four prestigious Universities of London, Cambridge, Oxford and Manchester.

Contribution to Economics

Professor Hicks, a prolific writer, has to his credit, among others, the following luminous publications:

1. *Theory of Wages* (1932),
2. *Value and Capital* (1939),
3. *A Contribution to the Theory of Trade Cycles* (1950),
4. *A Revision of Demand Theory* (1959),
5. *Essay in World Economics* (1959),

6. *Capital and Growth* (1965),
7. *Critical Essays in Monetary Theory* (1967) and
8. *A Theory of Economic History* (1970).

Besides the above, Prof Hicks has co-authored with his wife Ursula in some books and reports on public finance. He has published innumerable original papers and articles in learned international economic journals.

His classic contributions to the science of economics include L.M.I.S. diagram, compensation principle, indifference curve analysis, elasticity of of substitiution, elasticity of expectations of unity, four consumer surpluses, multiplier acceleration, interaction and so on.

In his controversial maiden work *The Theory of Wages* written at the age of 28, Hicks outlined the marginal productivity theory of wages and put forth the thesis that a rise in the level of money wages in all industries by a uniform extent would lead to unemployment. It will be noticed that Hicksian thesis is Pigovian and un-Keynesian in nature. Shove challenged Hicks in the similar manner as Keynes had pounced upon Pigou on the same issue. Reminiscent of 'Pigou-Keynesian controversy' 'Hicks-Shovian controversy' is still going on unabated.

In the famous paper "A Reconsideration of the Theory of Value" (1934), Hicks and R.G.D. Allen heavily bombarded Marshallian cardinal utility theory and successfully showed that indifference curves could be employed to reconstruct the theory of consumer behaviour on the basis of ordinal utility.

Then came in 1939, Hick's greatest unconventional book *Value and Capital: An Inquiry into Some Fundamental Principles of Economic Theory.* In the words of Dr. P.R. Brahmananda, *Value and Capital* is a tremendous effort to free general equilibrium theory from the rebuke of sterility and to cast it in the mould of, may we say, classical macro-economics.

In the words of Hicks himself *Value and Capital* is the reconsideration of the value theory of Pareto and then application of this improved value theory to those of dynamic problems of capital which Wicksell could not reach with the tools at his command. This major work which is a direct descendent of Leon Walras' *Elements of Pure Economics* and Vilfredo-Pareto's *Course* is a magnificent assimilation of the ideas of Walras, Edgeworth, Pareto, Marshall, Bohm-Bawerk, Wicksell, Sraffa, Myrdal and Keynes.

Value and Capital is divided into four parts, Part I deals with the theory of subjective value—wants and their satisfaction—the same subject as Book III of Marshall's *Principles*. Part II uses the results of his revised theory of subjective value to rework the general equilibrium analysis of Walras and Pareto. Part III deals with the foundations of dynamic economics. Part IV deals with the working of dynamic system.

In his *A contribution to the Theory of Trade Cycles*, Professor Hicks

explains the phenomenon of trade cycles by combining the principles of multiplier and acceleration. In Hicksian analysis cyclical fluctuations are the results of interaction between the multiplier and the accelerator. According to Hicks there are two types of investment—autonomous investment and induced investment. The Autonomous investment which is expressed through the multiplier and induced investment which is expressed through accelerater cause cyclical business fluctuations according to Hicks.

Hicks (and Kaldor), gave birth to the celebrated compensation principle which is often known as the New Welfare Economics in contrast to Pigou's Old Welfare Economics. Hicks expresses the compensation principle in his article "Rehabilitation of Consumers' Surplus" (1941) thus: "If A is made so much better off by change that he could compensate B for his loss and still have something left over then the reorganisation is unequivocal improvement." This principle extends Paretian social Welfare criterion to ambiguous changes or those changes which benefit some and harm others. According to Hicks-Kaldor criterion, any reorganisation will increase social welfare, if it is possible for the state to give full compensation to the losers out of the fund raised by taxing the gainers and still retain a surplus. Hicks' principle by rejecting Paretian position emphasises the significance of total conditions as contrasted with marginal conditions.

Hicks's *Revision of Demand Theory* is a revision of his own ideas presented in his *Value and Capital.* Chief reasons underlying the revision were the emergence of Paul A. Samuelson's revealed preference approach, the rise of econometrics, the appearance of mathematical theories of strong and weak ordering and the discovery of a more closely reasoned derivation of demand theorem from a few a simple logical propositions. All this does not imply that his theory developed in 1939 was wrong: it was deficient for want of explicit reference to econometrics.

It is important, however, to note that Hicks in the *Revision* continues to reject cardinalism and the hypothesis of independent utilities. He once again breaks price effect into substitution effect and income effect as he did in the *Value and Capital.* What a change? None of the 22 diagrams drawn in the *Revision* contains indifference curves to which he 'gave birth' in 1934. He abdicated also the assumption of continuity. All this was to be more effective.

"The ideal consumer", according to the revised theory, "(who is not affected by anything else than current market conditions) chooses that alternative, out of the various alternatives open to him, which he most prefers, or ranks most highly. In one set of market conditions he makes one choice, in others other choices; but the choice he makes always expresses the same ordering and must, therefore, be consistent with one another. This is the hypothesis made about the behaviour of the ideal consumer". (Hicks).

Prof. Hicks in his *Capital and Growth* shows how the notion of growth equilibrium is untenable on theoretical grounds. The book introduces the new concept of a 'traverse', the time process of a shift from one steady-state to another.

In his *Critical Essays* he expresses the general view that monetary policy cannot *per se* lift an economy from the slump. "In a sense Hicksian monetary theory is forging of a new powerful and non-Keynesian explanation of why in dynamic system the steady growth rate may require a rate of interest, as a supply price, above the Neumann-growth rate as given by population growth rate. Hence there has to be sufficient growth rate of input-productivity, proceeding at a steady rate, that has to meet the difference."

Hicks's greatness lies in developing new concepts, e.g. elasticity of substitution, diminishing marginal rate of substitution, super-multiplier, substitution and income effect, compensating variation in income, technical complementarity, weak ordering etc.

Compiler

HICKS, URSULA K. (*History of economic thought)

A world-renowned British economist and an authority on public finance.

Formerly Miss U.K. Webb, she married Sir John R. Hicks in 1935. Lady Hicks, Emeritus Fellow of Linacre College of Oxford, has written, among others, the following important books:

(1) *The Finance of British Government* 1920-36 (1938),
(2) *Public Finance* (1946),
(3) *British Public Finance, Their Structure and Development,* 1880-1952 (1954),
(4) *The Taxation of War Wealth* (1954) (with J.R. Hicks and Rostas)
(5) *Standards of Local Expenditure* (with J.R. Hicks)
(6) *Development Finance, Planning and Control,*
(7) *The Large City: A World Problem.*

Besides, she has published many articles in *Economic Journal* and *Review of Economic Studies.* In 1950 professor Hicks along with her husband made an inquiry into the finances of Jamaica.

The unique feature of Ursula Hicks's writings is that they integrate economic theory and economic history. She has, apart from improving upon Daltonian seminal public finance, contributed several nobel ideas in the field of public finance. She defines public finance as most directly concerned with those people who are engaged in providing services whose scope and variety are determined not by the direct wishes of consumers, but by the decision of Government bodies'.........The main content of public finance consists, then, of the examination and appraisal of the

methods by which governing bodies provide for the collective satisfaction of wants, and secure the necessary funds to carry out their purpose. She warns, "Public finance is not a department of politics, it is concerned with the satisfaction of wants, not with the art of governing. It is an art, it is concerned with actual problems".

To Hicks, economics is both a positive and normative discipline. On this score, she writes, "The duties of the economist to the community cover two quite different services. In the first place, he must be able to analyse the working of the system, in the second place, on the basis of his analysis, he should be able to offer advice for its improvement. Thus the discipline of economics can be divided into two distinct processes namely what we may call the positive sector and normative sector". She adds, "public finance, being a part of the general study of economics also possesses a positive and normative side."

Mrs. Hicks has precisely formulated the 'utility optimum"—the maximization of satisfactions. She states, "utility is maximized when it is impossible to increase the satisfaction of the individual without diminishing the satisfaction of another after full allowance has been made for compensation. She asserts that fiscal policy must conform to the above said criterion.

Professor Hicks lays down three principles of taxation, *viz.*, (i) the primary purpose of taxation must be to finance the public services, (ii) the citizens should be taxed according to their ability to pay, and *(iii)* taxes should be universal imposed without distinction of persons between citizens similarly placed.

Quoting historical experience of Italy, France, Germany and Britain, she admonishes that tax bankruptcy can cause the fall of Governments.

Lady Hicks distinguishes between "formal incidence" and "effective incidence." She defines the objectives of fiscal policy as "stability at a high level of employment on the one hand and on the other the steady increase of productivity so as to obtain the maximum growth from the available resources."

Mrs. Hicks who originated the important concept of "Planning from below", distinguishes between "economic development" and "economic growth", by saying that the former relates to underdeveloped countries while the latter applies to developed countries. She terms the underdeveloped countries as development countries.

Compiler

HICKS'S THEORY OF TRADE CYCLE (*Business cycles)

One of the leading theories of trade cycles. It was expounded by the Nobel Prize winner Sir J.R. Hicks in his *A Contribution to the Theory of Trade Cycle* (1950). It is variant of multiplier—acceleration model associated with R.F. Harrod and Paul A Samuelson, according to whom leverage i.e. the combined effect of multiplier acceleration causes business fluctuations in the economy.

Hicks's theory may be condensed as follows:

Autonomous investment through the multiplier and induced investment through the accelerator bring in cyclical fluctuations in business activity. Autonomous investment is that investment which is determined independent of existing economic conditions such as the level of national income and consumption. It is an exogenous factor arising from increasing population, a technological change or public investment. In the words of Estey, autonomous investment to Hicks represents the growth factors due to increase of population and progress of technology, primarily the the latter. It is the autonomous investment whose force is expressed in the multiplier and which initiates an expansion of employment and output. Hicks assumes that autonomous investment increases at a constant percentage rate.

Induced investment, on the contrary, is determined by past changes in the level of income or consumption and is a reaction to increments or decrements in the total demand or consumption. It is an endogenous factor, a reaction to changes initiated by autonomous investment. Its force is expressed in the accelerator.

Let us suppose that the system which is in equilibrium, is disturbed in the form of an increase in autonomous investment. Then income and output will increase to the degree indicated by the multiplier. This increase in income and employment will result in induced investment through the accelerator, which gives rise to further increase of income (multiplier) and further induced investment (accelerator) and so on. In short, an increase in autonomous investment brings expansion in induced investment *via* multiplier acceleration interaction. This expansion will continue till the upper ceiling as determined by full employment level is reached. Once the expansion is checked by the upper limit, the rate of expansion slows down to its normal rate. The rate of induced investment is cut down, for the stimulus of autonomous investment (which gives rise to induced investment) was ephemeral. Now the multiplier-accelerator mechanism sets in reverse—falling investment reducing income reduced income reducing investment and so on. Thus, the downward path of business. But the accelerator does not work as vigorously as it did on the way up. The accelerator loses much of its stamina in the slump. "It remains a mere ghost of what it was in the boom. The explosive downward tendency is thus kept in check by the abdication of the accelerator. At this stage, the continuous influence of the growth factor is exhibited in the trend of autonomous investment and now the accelerator starts working in upward direction and recovery begins to merge into boom." Thus the cycle goes.

Compiler

HIDDEN HAND (*Economics of development)

Another name for "invisible hand".

Compiler

HIDDEN INFLATION (*Monetary economics)

Whether credit inflation is good or bad depends on the circumstances and particularly on the state of employment. It need not lead to price inflation if increasing employment and output offset the increase in aggregate demand. This situation is called hidden inflation.

George N. Halm

HIDDEN TAX (*Public finance)

An indirect tax is termed as hidden tax since it is merged in the price of the commodity, without being shown explicitly.

Compiler

HIGGLING (*Theory of value)

A method of determining prices most frequently used where there is only buyer and seller in the market or where, as in the case of collective bargaining, there is an organised group of buyers facing an organised group of sellers.

Kenneth E. Boulding

The process whereby the commodity price is determined under monoply-monopsony or oligopoly-oligopsony.

Compiler

HIGH POWERED MONEY (*Monetary economics)

The central bank deposits have been named "high powered" (basic) money in comparison with deposit money or cheque book money, upon the expansion of which no further issuance of money can be based.

George N. Halm

HIGHLY DEVELOPED COUNTRIES (*Economics of development)

According to Eugene Staley, as quoted by Paul A. Samuelson, Australia, Belgium, Canada, Denmark, France, Germany, Netherlands, New Zealand, Norway, Sweden, Switzerland, the U.K., and the U.S.A. are the highly developed countries. Japan and Italy have joined the family of H.D.C.

Compiler

HIND MAZDOOR SABHA (*Economics of labour)

One of the major trade unions of India. Founded in 1948, it stands for the establishment of a democratic socialist society.

Compiler

HINDUSTAN MACHINE TOOLS LTD., (H.M.T.) (*Industrial economics)

Popularly known as H.M.T., it is one of the leading public sector undertakings of India. Established in it is a multi-unit company with an

annual capacity of 1,000 machines per unit. Two of these units are at Bangalore and the others are at Pinjore (Haryana), Kalamassery (Kerala) and Hyderabad (Andhra Pradesh). Besides, the company has a watch factory at Bangalore, with an approved capacity of 3,60,000 watches per year.

The company has also undertaken the manufacture of metal forming presses, agricultural tractors and printing machinery.

Compiler

HIRAKUD DAM (*Agricultural economics)

The 4,801.2 metre long Hirakud dam in India (Orissa) is the world's longest dam. Flanked on both sides by 21 Km. of dykes, it impounds 810 crore cubic metres of Mahanadi water. The total installed capacity of the power house at Hirakud is 123.20 MW.

India 1975

HIRE-PURCHASE (*Commerce)

A form of consumer credit in which the buyer pays a deposit on an article and pays the rest of the purchase price plus interest in regular instalments over periods of six months to two years or more, the article being regarded as the property of the seller until the final payment has been made by the purchaser.

It was first introduced in the U.S. for the benefit of those who were unable to pay the whole purchase price at a stroke.

The system has since been very popular in several countries.

Compiler

HIRSCHMAN'S THEORY OF ECONOMIC DEVELOPMENT (*Economics of development)

Albert Hirschman, like, Hans Singer, criticizes Rangar Nurkse's theory of balanced growth, and argues that deliberate and judicious unbalancing of the economy in accordance with a predesigned strategy, is the best way to achieve economic growth.

He put forward the theory in his provocative book *The Strategy of Economic Development* (1958).

According to him, balanced growth in poor economies will be limited by their inability to invest and hence unbalanced growth i.e., concentration on certain specific areas of the economy is the best way of development. (Nurkse stands for "a frontal attack......a wave of capital investment in a number of different industries").

The Nurkse-Hirschman debate has not ended though Nurkse is dead.

Compiler

The concept of 'unbalanced growth' has been popularized by A.O. Hirschman. It is his contention that deliberate unbalancing of the

economy, according to a predestined strategy, is the best way to achieve economic growth in an underdeveloped country. According to Hirschman, investments in strategically selected industries or sectors of the economy will lead to new investment opportunities and so pave the way to further economic development. He maintains that "development has of course proceeded in this way, with growth being communicated from the leading sectors of the economy to the followers, from one industry to another, from one firm to another." He regards development as "chain of disequilibria, of which profits and losses are symptoms in a competitive economy. If the economy is to be kept moving ahead, the task of development policy is to maintain tensions, disproportions and disequilibria.

M.L. Jhingan

HIRSCHMAN'S THEORY OF POPULATION (*Economics of development)

In his important book, *The Strategy of Economic Development* (1958), Hirschman, contrary to popular notion, suggests that even in underdeveloped countries, population pressure may, if it is not severe as to be demoralizing, provide the stimulus needed to improve production techniques. His two propositions are: (1) "that population pressure on living standards will lead to counterpressure, i.e., to activity designed to maintain or restore the traditional standard of living of the community", and(2) "that the activity undertaken by the community, in resisting a decline in its standard of living causes an increase in its ability to control its environment and to organize itself for development".

In short "population explosion" is one form of "shock" which may move a country off dead centre and start it on the path to economic development.

Benjamin Higgins

HISTOGRAM (*Statistics)

Technical name for "bar chart".

Compiler

HISTORICAL COMPARISON (*Business cycles)

Hardy and Cox classified all forecasts of business cycles into groups, *viz.*, cross-cut analysis and historical comparison.

Historical comparison method of forecasting business cycles considers trade cycles essentially rythmic in nature exhibiting overtime a periodical fluctuation only disturbed by sporadic, spasmodic, exogenous influences. This method would be heavily based on past cycles and sequences and on the assumption that the behaviour of the past will extend into the future.

Compiler

HISTORICAL ECONOMICS (*History of economic thought)

One of the four types of economic theory, the other three being (1) Theory of Rational Action, (2) Institutional Economics, and (3) Macro-and-Micro Economics.

According to historical economics, the task of economics is to explain what people actually do and not what they would do if they were rational.

The objective of the Historical Economist was to remedy the defects of Deductive theory, to discover the "Laws of motion" governing the processes and development of societies. These economists hoped to get the answers to their questions from the study of history. Prominent among this group are predominantly German. They are :

Friedrich List (1789-1846),
Karl Marx (1818-1883),
Gustav Schmoller (1838-1917),
Warner Sombart (1863-1941) and
Max Weber (1864-1920).

Anatol Murad

HISTORICAL SCHOOL (*History of economic thought)

The Historical School of Economics which assigns overwhelming importance to history in the study of economic process, was born in 1843 when Wilhelm Roscher (1817-94) the first economist of the School published his *Grundiss*. "This school", writes Eric Roll, "represents a striking example of the difficulty of survival of the pure classical doctrines once it was faced with new economic developments".

Wilhelm Roscher, Karl Knies ; Bruno Hilderbrand, Schmoller etc., are the prominent members of this school.

The Historical school which was most influential in German speaking countries for about four decades was ousted from its exalted position in 1883 when Carl Menger, one of the founders of the Marginal school of economic thought published his *Untersuchungen*.

Compiler

The Hegelian *Zeitgeist* on the one hand culminated in Marxian economics and on the other led to the German Historical School composed of scholars who professed to be rejecting all economic theory in favour of letting the multivarious facts tell their own organic story. By the latter part of the 19th century, this school was associated with the *Kathedersozialisten* ("socialists of the chair" who believed in the star of the Prussian state and its fruitful interferences with the market.

The Historical School had a strong influence on American critics of Classical and Neo-classical economics. But with the collapse of the German

Empire in World War I and the exhaustion of its creative energies in scholarly innovation, the Historical school simply ran out of the stream.

P. A. Samuelson

According to Seligman, the Historical School was a violent reaction against the Classical philosophy and methodology, or a rebellion against Classicism.

The Historical School adopting inductive method challenged virulently in the middle of the 19th century the classical deductive method. It originated in Germany but it had also followers in Britain. Thus we have : (1) the German Historical School and (2) the British Historical School.

The German School has again two groups : (1) Earlier or younger Historical School. The first group concerned itself chiefly with the criticism of classical theories on the method of study. The second group, besides furthering the work of the first, also positively contributed to the study of the economic science.

The earlier group comprised Wilhelm Roscher (1817-96), Bruno Hilderbrand (1812-78), and Karl Gustav Adolf Knies (1821-98).

The later group included Gustav Schmoller (1838-1917), Adolf Wagner (1835-1917), G. F. Knapp (1842-1926), Karl Bucher (1847-1930), Werner Sombart (1863-1941), Max Weber (1864-1920) and Ludwig Joseph Brentano (1844-1931).

The British School consisted of Richard Jones (1790-1855), Walter Bagehot (1826-77), Cliffe Leslie (1825-82), John Kells Ingram (1824-1907), Arnold Toynbee (1852-83), Thorold Rogers (1823-90), and William James Ashley (1860-1926).

The German Historical School criticised the Classicism on the following three points : (a) use of the deductive method, (b) universality of economic laws, and (c) crude psychological assumptions.

S. K. Srivastav

HISTORY OF ECONOMIC ANALYSIS (*History of economic thought)

One of the greatest works in economics written by the late Joseph A. Schumpeter—one of the greatest economic scientists.

Though Schumpeter worked upon it for nine years, he could not quite finish it. It was the result of his intention to translate, revise, and bring upto-date the little sketch of doctrines and methods written for the first volume of Max Weber's *Grundiss* published in 1944.

The 1200-page voluminous *History of Economic Analysis* is divided into five parts : (I) Introduction—scope and method (50 pages), (II) From the beginnings to the first Classical situation (to about 1790) (pp 51-378), (III) From 1790 to 1870 (pp. 379-752), (IV) From 1870 to 1914 (and later) (pp. 753-1138), and (V) Conclusion—A sketch of modern developments (pp. 1139-1184).

Schumpeter's original plan was not a very ambitious one. He certainly had no intention of spending nine or ten years on a history of economic analysis. At first he thought of finishing the book within 300-400 pages by giving his spare time for a few months or a year. Later he thought of one large volume of 600-700 pages. However the work got elaborated to the present size because his interests were constantly broadening, and he found it increasingly difficult to treat very briefly something which was to him a fascinating development.

Schumpeter probably began writing in his own hand the *History* in 1941. As time went on, he began to emphasize that this was a history of economic analysis and not a history of economic thought.

Though he had been working on his *History of Economic Analysis* during the last nine years of his life, in a large sense, Schumpeter had been working on it all his life. Probably this work is the culmination of all his writings and teaching.

The entire *History* was first written in long hand.

Schumpeter died in 1950 without seeing the publication of the book. After his death, his wife Elizabeth Boody Schumpeter (herself an economist) began editing the book for publication. She prepared the book up to the last weeks of her prolonged illness. She too died without seeing the book out. At her death the author index was nearly finished. Dr. Robert Kuenne prepared the subject index. The Nobel Prize winner Professor Wassily Leontief helped in making the publication possible. The book was published in Great Britain in 1954.

Schumpeter's encyclopaedic and monumental work is verily the Bible of Economics, for it contains anything and everything of Economics up to 1950 right from the days of Aristotle. The analysis is highly penetrating and subtle. The language is impeccable and inimitable pregnant with seriously fertile humour. Views are candid divorced from cynicism or idolatry. Facts are authentic. Contribution is original. Though the book is marathon, every line is itself a paragraph. Alas, Schumpeter could not live to see the publication—his life's achievement.

Compiler

HISTORY OF ECONOMIC ANALYSIS (*History of economic thought)

By History of Economic Analysis I mean the history of the intellectual efforts that men have made in order to *understand* economic phenomena or, which comes to the same thing, the history of the analytic or scientific aspects of economic thought.

Joseph A. Schumpeter

HISTORY OF ECONOMIC THOUGHT (*Economics)

A critical account of the development of economic ideas, searching into their origins, interrelations and manifestations.

Lewis H. Haney

A study of the heritage left by writers on economic subjects.

J. F. Bell

An analytical historical account of contributions made by economists to the development of economic science.

Of all the branches of economics, it is the most absorbing, for in it are revealed the various contributions of economists to different branches of economics.

Some of the outstanding Histories of Economic doctrines or thought are :

1. *History of Economic Analysis*, by Joseph A. Schumpeter,
2. *Economic Theory in Retrospect*, by Mark M. Blaug,
3. *A History of Economic Thought* by Eric Roll,
4. *Economic Doctrines, by* Frank Neff,
5. *History of Economic Thought by* Lewis H. Haney,
6. *A History of Economic Thought* by J.F. Bell,
7. *The Development of Economic Doctrines*, by Alexandar Gray,
8. *A History of Economic Ideas* by Robert Lekachman,
9. *A History of Economic Doctrines* by Charles Gide and Charles Rist,
10. *A History of Political Economy* by J.K. Ingram,
11. *The Development of Economic Thought*, Edited by Spiegel.
12. *The Development of Economic Thought* by P.C. Newman,
13. *Ten Great Economists* by J.A. Schumpeter,
14. *The History of Economic Doctrines* by E. Heimann, and
15. *Economic Thought of the Twentieth Century* by Claudio Napoleoni.

To the list may be added *Economic Thought in Modern India* by the late Arvind D. Karmarkar.

Compiler

HOARDING (*Monetary economics)

The quantity of money minus what is required to satisfy the transaction motive.

or

Idle or inactive money including notes, coins and deposits or whatever is regarded as money.

Gottfried Von Haberler

Any part of saving not used for investment.

W.W. Haines

Income not consumed at all.

J.S. Mill

A Person (and person includes composite persons such as joint-stock companies) may be said to hoard in any period if he takes steps to increase the proportion existing at the beginning of that period between his money stock and his money income.

Sir D.H. Robertson

The storing of wealth by the individual for possible future use or for indefinite possession.

International Encyclopaedia of Social Sciences

The putting aside of money (or jewels and the like, easily convertible into money and easily stored) with no expectation and intention of using them either for investment or for expenditure on consumer goods.

F.W. Taussig

The building up of monetary holdings.

Adam Smith

By "hoarding" we mean withdrawing money income from current expenditure without diverting it to non-consumption purposes; in other words, the building up of cash balances.

In the classical period, the term was always used in a pejorative sense: only a "miser" would want to increase his monetary holdings above the minimum required for transactions purposes. To the Classicists "hoarding" was abnormal and exceptional.

Mark Blaug

HOARDS (*Monetary economics)

The accumulated stocks of money resulting from past hoarding, net.

W.W. Haines

HOBSON, JOHN A. (*1858-1940) (*History of economic thought)

One of economics's more appealing heretics. Hobson's *Work and Wealth* (1914) was an explicit treatment of welfare economics. He dealt many shrewd blows at contemporary economics. He charged its leaders with overemphasis upon production. His aim was to "seek some intelligible and consistent method of human valuation for economic goods and processes".

Hobson examined in detail the costs as well as the benefits of all varieties of human labour, and all kinds of consumption. He discovered monotony, danger and oppression in many kinds of Labour and considerable harm in many articles of consumption. Quoting approvingly Ruskin's "there is no wealth but life", Hobson discarded monetary in favour of human measures.

Hobson was an indignant writer. His business cycle theory (of underconsumption) a corollary of distorted distribution of income, found the villain in oversaving.

Robert Lekachman

Hobson was in feud with Marshallian economics. He opposed theories of his contemporaries. However, he fought them by theories without challenging their methodological credentials. He insisted upon what he considered to be irrational behaviour of consumers and upon institutional factors.

Hobson who had the good fortune to establish himself as an arch heretic in the heyday of Marshallian supremacy and to survive into a time in which this had become a badge of honour, was in many respects a very interesting man—vital, versatile and aggressive. He was an educated man —in the sense of having had a classical education and an emotional radical. In economics he was self-taught in a wilful way that made him both able to see aspects that trained economists refused to see and unable to see others that trained economists took for granted. He could never understand the way the professionals did not take to his message. Possibly owing to his inadequate training many of his propositions, especially his criticisms went neglected.

Belated recognition came in Keynesian times mainly on account of his doctrine of underconsumption.

From the long list of his books and pamphlets, it will suffice to mention: *The Physiology of Industry* (with A.F. Mummery, 1889); *The Industrial System* (1909); *The Evolution of Modern Capitalism* (1894; perhaps his best performance); *The Economics of Unemployment* (1922); *Gold, Prices and Wages*......(1913). But nobody who wishes to understand the man and incidentally, the economist's comedy-or tragedy-of errors should miss his delightful *Confessions of an Economic Heretic* (1938).

J.A.Schumpeter

A Well-known and highly controversial British economist.

Born in Oxford, Hobson taught for many years in public schools and gave extension lectures. Hobson, an economist, a social reformer and a journalist, wrote more than 50 books. They include:

1. *The Physiology of Industry* (1889)
2. *The Evolution of Modern Capitalism* (1894)
3. *Economics of Distribution* (1900)
4. *Imperialism* (1902)
5. *International Trade—An Application of Economic Theory* (1904).
6. *The Industrial System* (1904)
7. *Science of Wealth* (1911)
8. *An Economic Interpretation of Investment* (1911),

9. *Work and Wealth* (1914),
10. *Taxation in the New State* (1919),
11. *The Economics of Unemployment* (1922),
12. *Free Thought in the Social Sciences* (1926),
13. *Economics and Ethics* (1929),
14. *Confessions of an Economic Heretic* (Autobiography) 1938.

To Hobson welfare was good life. "Although the economic science", noted Hobson in his *Work and Wealth*, "has gradually tended to become less material in its outlook and treatment, and to give more attention to the psychological supports of the industrial system—yet the science remains distinctively mechanical and unfitted for the performance of any human interpretation of industry". He insisted that all concrete wealth or money income should be estimated in relation to cost of production and utility of consumption.

Hobson sympathised with labour and held that human costs or sacrifices of small savers were decidedly great.

He emphasised savings and the need to reconstruct the industrial system.

He argued that many commodities and services produced were useless and even dangerous to mankind. He called for removal of malproduction and malconsumption. He called for social control. The basis of social reforms in his own works was "from each in accordance with his ability and to each in accordance with his needs as a consumer".

He attributed economic crisis to oversaving or underconsumption.

He is best known for his theory of trade cycle and welfare economics.

Compiler

HOBSON'S THEORY OF TRADE CYCLE (*Business cycles)

The underconsumption or oversaving theory of trade cycle was propounded by socialistic minded economists like Major Douglas and J.A. Hobson. However, economic writers on business cycles such as Estey associate the theory with the name of the British economist J.A. Hobson only.

Hobson's theory is a recent form of the old theory of general overproduction which was attacked by J.B. Say and J.S. Mill.

The theory states:

"Very wide income disparities between the rich and the poor in the society by causing the uncanny phenomena of oversaving and underconsumption force the entire economic system into the seething cauldron of business cycle."

We may now amplify the theory. The Society suffers from a chronic malaise of undue savings and this evil is the root cause of the remaining phenomenon of depression and unemployment. The reason for this

situation lies in the unequal distribution in all industrial economies whose characteristic feature is the heavy concentration of wealth in the hands of the few.

The rich save more and more as their income increases. They are unable to spend the continuously swelling income that accrues to them. The bulk of savings comes from the higher incomes and consequently the rich being unable to spend, save and invest. Productive facilities are added. This business activity stimulates the expansion of bank credit, price rise. But wages lag behind prices. Wage earners tend to be conservative in their habits of consumption and they, in spite of wage-lag, get some increased income during expansion. But such increased incomes are added to the flow of savings. The result is that the volume of consumption, which consequent upon inequalities of income and wealth tends to be unduly small, becomes even smaller in relation to the increased total income. Over-production sets in; but the economic crisis results from general under-consumption. Thus there arises the depression phase.

Compiler

HOLDER OF BILL (*Monetary economics)

The person in actual or constructive possession of bill of exchange.

Compiler

HOLDING COMPANY (*Industrial economics)

A form of business organization which is created for the purpose of combining industrial units by owning a controlling amount of their share capital.

S.C. Kuchhal

In the broadest sense, and company having share capital which owns securities of one or more other companies. In a restricted but more usual sense, a holding company may thus be defined as any company with share capital which is in a position to control or materially to influence the management of one or more other companies by virtue in part at least, of its ownerships of securities of the latter.

International Encyclopaedia of Social Sciences

HOME ECONOMICS (*Economics)

Home economics as a distinct subject of instruction is the study of the economic, sanitary and aesthetic aspects of food, clothing and shelter as connected with their selection, preparation and use by the family in the home or by other groups of people.

The American Home Economics Association

The general term used chiefly in the U.S. to describe the subject of study formerly known as domestic science, domesic economy, household

arts or the science of home making. No definition of 'home economics' has yet been devised.

International Encyclopaedia of Social Sciences

HOME INVESTMENT (*International economics)

The increment of total capital situated at home exclusive of gold.

Lord Keynes

HOME PRODUCED REAL INCOME (*Economics of development)

Total net national real income minus property income from overseas.

Meier and Baldwin

HOME TRADE (*International economics)

Domestic trade. Trade within an area the prosperity of which interests the government in question or is subject to its jurisdiction.

Compiler

HOMO ECONOMOUS (*Economics)

Homo economous is a very simple species of mankind who know a great deal, reason accurately, behave predictably and are driven by uncomplicated motivation quite unlike you and me. He is a realistic man or rational man.

Robert Dorfman

HOMO OCCONOMICUS (*Economics)

Homo economous or economic man.

Compiler

HOMOGENEOUS FUNCTIONS (*Mathematical economics)

Functions that do not contain additive constants. They have the property that if each of the variables in the function is multiplied by a constant, the total function is increased by some power of that function.

Mark Blaug

HOMOGENEOUS OLIGOPOLY (*Theory of value)

By this we mean the fact that only a few large firms operate in a market and that the firms do not differ too much from one another.

Bo Sodersten

HOMOGENEOUS PRODUCT (*Theory of value)

The products are said to be homogeneous when they are perfect substitutes from the buyers' view point and when they (products) have infinite cross elasticity.

Compiler

HORIZONTAL AMALGAMATION (*Industrial economics)

A merger of firms at the same stage of production, as for example, a group of firms engaged in cotton spinning.

M.L. Seth

HORIZONTAL DISEQUILIBRIUM (*Business cycles)

As opposed to "vertical disequilibrium, it is a disproportion in the structure of production between industries of the same rank as measured by distance from consumption.

It is also termed as horizontal maladjustment or disproportion.

Gottfried Von Haberler

HORIZONTAL EQUITY (*Public finance)

Horizontal equity or the principle of equality states that people in equal positions should be treated equally.

This is perhaps the most widely accepted principle in taxation. It is fundamental to the ability-to-pay approach, which requires equal taxation of people with equal ability and unequal taxation of people with unequal ability.

Richard A. Musgrave

HORIZONTAL INTEGRATION (*Industrial economics)

It refers to the tendency of firms to specialise in single processes instead of undertaking the entire production of the commodity from start to finish.

M.L. Seth

An amalgamation of firms which are engaged at the same stage of production of some commodity.

A. Beacham

The union under single management of a number of enterprises of the same sort.

F.W. Taussig

The combining of a number of establishments which all operate at the same stage, or level, of production.

Raymond Bye

It is also called parallel combination.

Compiler

HOT HOLDER IN DUE COURSE (*Monetary economics)

A holder who has taken a bill complete and regular on the face of it, before it was due, and without notice of dishonour and in good faith

and for value and without notice when the bill was negotiated to him of any defect in the title of the person who negotiated it.

A.K. Basu

HOT MONEY (*Monetary economics)

It refers to the short-term capital movements from one country to another seeking either a higher rate of interest or safety of capital irrespective of the rate of interest.

M.L. Seth

HOLTELLING, HAROLD (B. 1895) (*History of economic thought)

An outstanding American economist.

Associate Professor of Mathematics at Stanford University from 1927, Hotelling was appointed in 1931 Professor of Economics at Columbia University. He held the post until 1946, when he was appointed Professor of Mathematical Statistics of the University of North Carolina.

The Hotelling-Lerner proposition states that marginal cost pricing in all industries would require subsidies to any industry operating with a falling supply price.

In his famous paper, "The General Welfare in Relation to Problems of Taxation and of Railway and Utilily Rates", published in 1938, in *econometica,* Hotelling resurrecting the concept of marginal-cost pricing for public enterprises, advanced the general principle that subsidies to decreasing-cost industries should be financed out of lump-sum, once-for-all taxes that do not bias the market's choices among goods and services.

The Hotelling thesis—the adoption of marginal-cost pricing would improve the general welfare by meeting the marginal conditions—is not yet effectively challenged by any one.

Hotelling is one of those who have done work in the New Welfare Economics (the others are J.R. Hicks, Paul Samuelson, Lionel Robbins, Roy Harrod, Abram Bergson and Nicholas Kaldor).

Compiler

HUMAN CAPITAL (*Economics of labour)

Skilled labour.

F. Benham

HUME, DAVID (1711-76) (*History of economic thought)

Though primarily a well-known philosopher, David Hume of Scotland is regarded as the most important pre-Smithian economist.

Hume, an original thinker, included in his famous *Political Discourses* (1752) a number of economic essays, e.g., "On Money", "On Interest", "On Commerce and Balance of Trade" etc.

Hume, a free trader praised the merchant as "one of the most useful races of men". He held that money was just a symbol possessing

no significance. He is one of the early proponents of the Quantity theory of money. (The others are Cantillon and Bodin).

His notion that interest rate depended on the rate of profit became the basis of Adam Smith's theory of rate interest.

Compiler

David Hume a perceptive friend of Adam Smith, strongly condemned the mercantilist conception of money. He was confident that money would always flow where it was wanted and needed.

Hume's favourite subjects were money and foreign trade.

Hume wrote: "...lawyers and physicians beget no industry; and it is even at the expense of others they acquire their riches; so that they are sure to diminish possessions of some of their fellow-citizens, as fast as they increase their own".

If he had written a treatise instead of few essays, it might well have resembled the *Wealth of Nations*.

Robert Lekachman

HUNDI (*Monetary economics)

An indigenous bill of exchange in India.

Compiler

HUNGER (*Agricultural economics)

Undernutrition and malnutrition.

P.U. Sukhatme

HUNGRY (*Agricultural economics)

Undernourished and malnourished.

P.U. Sukhatme

HYPER-EMPLOYMENT (*Economics of labour)

An alternative term for *overfull* employment. It means that situation in which the demand for labour greatly exceeds the supply. This situation generally arises during inflation.

M.L. Seth

HYPER-INFLATION (*Monetary economics)

The condition when all the equilibrating effect of inflation is lost and the value of the monetary unit sinks almost to zero.

Such hyper-inflation occurred in France, after the Revolution, in Germany in 1923, in Russia after the World War I and in Hungary after the World War II.

Kenneth E. Boulding

The alternative term for runaway or galloping inflation. There is such a tremendous expansion in the supply of money that eventually it

becomes worthless. The value of money falls to zero and a new currency has to be issued. Hyperinflation results in an astronomical rise in prices which disrupts normal eeonomic relations.

M.L. Seth

It is a price inflation over which the monetary authority has lost control. It occurs when the public expects prices to rise so fase and so continuously that to save becomes foolish; and people tend to spend their money with increasing rapidity. In this situation, savings are zero, the velocity of circulation of money is extremely high, government is forced into continous money creation, and output falls as a result of enormous distortions which develop in the production process.

George N. Halm

HYPOTHECATION (*Monetary economics)

It implies that the possession and property in the goods remain with the borrower and only an equitable charge is created in favour of the lender.

A.K. Basu

HYPOTHESIS (*Economics)

A theoretical proposition which is capable of being refuted by facts.

Friedman-Savage hypothesis and Indifference-preference hypothesis, are some of the examples.

Compiler

IOU (*Monetary economics)

Short from of 'I owe you'. An IOU is a promissory note.

Compiler

IDEAL CAPITALISM (*Economics of development)

The free exchange economy with its emphasis on ideal competition and perfect mobility of factors of production.

Andley and Sundharam

IDEAL TAX (*Public finance)

An ideal tax, from the point of view of production, is defined as one which causes no change in relative prices.

Hugh Dalton

IDLE POOR (*Economics of development)

Habitually lazy people,

Dudley Dillard

IDLE RICH (*Economics of development)

Wealthy rich.

Dudley Dillard

IGNORANCE EFFECT (*Theory of value)

A situation where commodities may be mistaken for other commodities for many reasons e.g. deceptive labels as well as price.

H.K. Manmohan Singh

ILLTH. (*Economics)

Antonym of 'wealth' employed by John Ruskin. It comprises useless or harmful goods.

Compiler

IMITATIVE ENTREPRENEURSHIP (*Industrial economics)

It is characterised by readiness to adopt successful innovations inaugurated by innovating entreprenuers.

It is one of the four types of entrepreneurship, the other three being:

(i) Innovating entrepreneurship,
(ii) Fabian entrepreneurship, and
(iii) Drone entrepreneurship.

Clarence Danhop

IMMIGRTION (*International economics)

Inflow of population.

Compiler

IMPACT EFFECT (*Theory of value)

The immediate effect of a change in demand when supply cannot be immediately readjusted to the new situation.

M.L. Seth

IMPACT OF TAX (*Public finance)

It refers to the point of original assessment, i.e. to the payment of tax in the first instance.

Andley and Sundharam

Initial money burden of a tax is called impact of tax (while the ultimate money burden of a tax is known as incidence of tax).

Compiler

IMPERFECT CARTEL (*Theory of value)

A perfect cartel is an agreement among the firms in an industry that results in the maximization of the joint profits of the member firms.

But cartels are always imperfect, which here means only that though they raise prices and profits, they do not reach the levels of monopoly.

Donald Watson

IMPERFECT COMPETITION (*Theory of value)

Industrial state in which neither the conditions of perfect competition nor the conditions of pure monopoly are completely observed.

The three important cases lying in the general field of imperfect competition are—(i) monopolistic competition, (ii) perfect oligopoly, and (iii) imperfect monopoly.

Kenneth E. Boulding

Competition between sellers under such conditions that the individual seller is able by his own actions to exert some influence upon the market price.

Fairchild, Buck and Slesinger

Competition that is not pure is called imperfect competition. (Pure competition in an industry means many firms producing homogeneous products.) It has two forms, monopolistic competition and oligopoly.

Donald Watson

All those market situations which lie between perfect competition and pure monopoly constitute imperfect competition.

Compiler

IMPERFECT COMPETITOR (*Theory of value)

Anyone who buys or sells a good in large enough quantities to be able to affect the price of that good.

Paul A. Samuelson

IMPERFECT MARKET (*Theory of value)

The market is said to be imperfect when some buyers or sellers, or both are not aware of the offers being made by others.

Frederic Benham

IMPERFECT OLIGOPOLY (*Theory of value)

A state of industry in which a few firms sell heterogeneous products etc. It is an important case of imperfect competition.

Kenneth E. Boulding

Oligopoly with product differentiation. In this case the products sold by the oligopolists are not homogeneous but are close substitutes to one another.

Compiler

IMPERIAL PREFERENCE (*International economics)

A term applied to the policy of granting a preferential tariff to countries of the British Empire. The idea was first expounded in 1903 by Joseph Chamberlain.

Compiler

IMPERIALISM (*Economics of development)

By "imperialism" is meant a foreign policy that seeks political and economic control over backward areas to guarantee the home country an outlet for idle savings and surplus manufactured goods in exchange for strategic raw materials.

Mark Blaug

IMPORT LICENSE (*International economics)

License for importing goods to be obtained by the importer from the government.

K.K. Dewett

One of the five different types of direct import quotas, the other four being (i) tariff or customs quotas, (ii) unilateral import quotas, (iii) bilateral quotas, and (iv) mixing quotas.

Import licensing was introduced to overcome the difficulties in the administration of the global quota. It prevents the rush to import. It introduces equality of treatment for different importers.

H.G.P. Srivastava

IMPORT QUOTA (*International economics)

A system in which a fixed amount which may be imported cannot be exceeded.

G. Von Haberler

The practice of disallowing the importation of a commodity after a limit which is arbitrarily fixed by the government during a given period.

K.K. Dewett

IMPORT PROHIBITION (*International economics)

Prohibiting by law or allowing only under defined conditions the importation of certain commodities.

K.K. Dewett

IMPORT SUBSTITUTION (*International economics)

There exist different ways of defining the term 'import substitution', but the definition commonly in vogue at present is: Import substitution is said to occur when the proportion of the total supply of a particular

commodity or group of commodities which is obtained through import rather than through domestic production declines in the country concerned.

H.G.P. Srivastava

Import substitution, i.e. gradual replacement of importation by domestic production, is one of the chief objectives of Indian economic planning.

Compiler

IMPURE COMPETITION (*Theory of value)

Imperfect competition. It lies between pure competition and pure monopoly.

A.W. Stonier and D.C. Hague

IMPUTATION (*Theory of value)

Friedrich von Wieser's (1851-1926) term to denote the process of attributing value to the factors of production in accordance with their contribution to the value of their products.

Compiler

The theory of imputation was outlined in Wieser's *Ursprung des Wirtschaftlichen Wertes* (1884), one of the earliest non-mathematical solutions to the problem of distributive shares. The germ of this theory is to be found in Menger's distinction between "first-order goods", consumer goods, and "high-order goods", intermediate goods and the dependence of want-satisfying power of the latter on the former.

Mark Blaug

INCENTIVE (*Public finance)

Encouragement by the government to the producers in different forms such as tax reduction, tax holiday, provision of infrastructure etc. Fiscal and monetary incentives are the more common in backward economies.

Compiler

INCIDENCE OF TAX (*Public finance)

It refers to the point at which "tax chickens finally come to roost".

Etl Plank

The settlement of the tax burden on the ultimate tax-payer.

E. R. A. Seligman

Direct money burden falling upon someone.

Hugh Dalton

The final resting place of the direct money burden of a tax.

Compiler

The locale of the final burden of the tax.

Otto Von Mering

It has almost as many meanings as users. Most writers have associated the word with the effects of taxes on prices. There have at various times been attempts to define 'incidence' more broadly to include, for instance, the effects on the allocation of factors between industries or even on the supply of factors coming forth for employment. As against these broader definitions, the Colwyn Committee of 1927 narrowed down the concept to the very immediate short run distributional consequences as distinct from the longer-term 'effects' on relative outputs and the supply of factors at work.

Because of the ambiguity surrounding the term, we shall in general try to avoid using it.

A. R. Prest

The term *incidence* as commonly used refers to the location of the "ultimate" or the "direct" money burden of the "tax as such". It is said to occur whenever a particular price of the tax comes to "rest" with the final payee whether at the point of impact or further down the direct line of subsequent transactions in the taxed product or service.

We define incidence as one of the changes in distribution as a result of taxation.

Richard A. Musgrave

INCOME (*Theory of value/Public finance)

Income=Value of output=consumption+investment.

J. M. Keynes

It consists of the economic goods produced and received by an individual, firm, or community during a given period.

Anatol Murad

A flow of goods during a specified period of time.

Fairchild, Buck and Slesinger

Commonly in economics, it is understood as a flow of satisfactions from capital or labour. This is real or psychic income.

For tax purposes, it means net receipts before disposition for consumption and saving.

Philip E. Taylor

The money or money's worth which comes in during a definite period over and above the expenses of acquisition.

E. R. A. Seligman

In public finance, income is defined as accretion, or increase in net worth plus consumption during a given period.

R. A. Musgrave

Broadly speaking, the term 'income' refers to the economic gain to a particular person during a specified period of time. In comprises a person's consumption during a given period of time as well as the net increase in the personal wealth or an individual during the same period.

There are two concepts of income : service-flow concept and net accretion concept. According to the service-flow concept, income is the value of goods and services consumed by an individual during a particular period of time. This concept was formulated by Irving Fisher of Yale University (U.S.A.). The net accretion concept includes income of all types of receipts or accruals in purchasing power to an individual between two points of time.

Carl Plehn considered income as recurrent receipts.

There are several concepts of income : real income, money income and national income etc.

Compiler

INCOME APPROACH (*Monetary economics)

It may be stated thus :

Other things remaining equal, the price level of new goods varies in direct proportion to the demand for such goods and inverse proportion to output.

Mathematically stated—

$Py = \frac{MVy}{Y}$ Where

Py=the price level of new goods,

M=the outstanding quantity of new money,

Vy=Income velocity of money (i.e., the average number of times the quantity of money is spent for output in a year and other period of time),

Y=the output (Supply) of new goods

MVy=the demand for new goods.

Raymond. P. Kent

INCOME CONSUMPTION CURVE (*Theory of value)

A line drawn through the equilibrium points for all possible levels of income is known as income consumption curve. It shows how the consumption of the two goods reacts to changing income when prices of both goods are given and costant.

A.W. Stonier and D.C. Hague

In my *A Reconsideration of the Theory of Value*, I called the income consumption curve, expenditure curve. It was clearly a bad name.

The curve shows the way in which consumption varies, when income increases and prices remain unchanged.

J. R. Hicks

INCOME CREATING FINANCE (*Public finance)

Deficit financing.

Dudley Dillard

INCOME DEFLATION (*Monetary economics)

Decrease in the cost of production.

J. M. Keynes

INCOME DEMAND (*Theory of value)

The quantity of goods and services which would be bought by consumers at various levels of money income, the prices of the goods and services in question and the prices of the substitutes remaining constant.

Compiler

INCOME DEPOSITS (*Monetary economics)

A man must hold a stock of money or a ready command over it in the form of a bank deposit, both to bridge the intervals of time between receipts and expenditure and to provide against contingencies. Deposits of this kind replenished by individuals out of their personal income and employed by them to meet their personal expenditure and their personal savings we shall call them income deposits.

J. M. Keynes

INCOME EFFECT (*Theory of value)

The effect of a change in the price of a commodity upon the consumer's real income.

Or

The income effect of a change in price is the change in quantity demanded attributable to the ensuing change in real income.

D. S. Watson

It means the change in consumer's purchases of the goods as a result of a change in his money income, prices of the goods and his tastes and preferences remaining unchanged. Income effect may be either positive or negative. It is said to be positive when with the increase in money income of the consumer, his consumption of good also increases. It is said to be negative when with the increase in money income of the consumer, his consumption falls. The latter happens in the case of inferior goods.

Compiler

There is the possibility that the consumer may become better off or worse off because his income changes, but prices remain constant. The consumer's satisfaction will be either increased or decreased, for he has a larger or a smaller income to spend. The result of this type of changed income is styled as an income effect.

A. W. Stonier and D. C. Hague

INCOME ELASTICITY OF DEMAND (*Theory of value)

A measure of responsiveness of quantity bought to a change in income received.

George L. Bach

The proportional change in the quantity of a good bought divided by the proportional change in income, prices remaining the same.

Colin Clark and Margaret Haswell

It shows the way in which the consumer's purchases of any good change as a result of a change in his income. It shows the responsiveness of a consumer's purchases of a particular good to a change in his income.

$$\text{Income-elasticity,} = e_i = \frac{\text{Proportionate change in demand}}{\text{Proportionate change in income}}.$$

A.W. Stonier and D.C. Hague

INCOME-EXPENDITURE APPROACH (*Monetary economics)

This is the modern theory of value of money. It emerged due to the shortcomings of old quantity theory of money in both of its transaction and cash-balance versions.

Though attributed to Lord Keynes, the theory has a long history. As early as 1705 Bernard De Mandeville, a medical practitioner showed in his pamphlet "The Fable of Bees or a Private Vice, Public Benefits" that thrift was a national curse and spending accounted for national prosperity.

In 1844, the Thomas Tooke stressed that it was income rather than the quantity of money that determined prices. He stated, "The prices of commodities do not depend upon the quantity of money.........but on the contrary, the amount of circulating medium is a consequence of prices".

Knut Wicksell took Tooke's analysis as the starting point for his theory of money and prices.

In 1925 Aftalion effectively stated the income-expenditure theory of money and for the first time developed it in the form of an equation:

$$R = PQ$$

where, R = the money income

P = the price level and

Q = the total production,

However, it was Lord Keynes who developed the theory in its full-fledged form. Bach observes, "This approach which grew out of cash balance analysis of motives for spending and saving, was first popularised by Keynes."

The income-expenditure theory of the price level employs the equation:

$$P = \frac{Y}{O}$$

where,

P denotes the price level,

Y stands for income, i.e. the total expenditures in a given period of time and

O signifies the total output of economic goods produced in the same period.

The above equation looks very much like the equation of exchange $\left(\text{i.e. } P = \frac{MV}{T}\right)$; but they are not quite alike.

In the present theory, O stands for volume of production where T stands for particular market exchanges.

Similarly, Y is not the same as Mv, because the present theory is concerned with the income velocity (also referred to as circuit velocity of money) rather than transaction velocity or exchange velocity.

Compiler

Since the World War, the income and expenditure approach to the explanation of the interrelationships of money, prices, and business activity has been an outstanding event in the history of monetary theory. The theory elaborated and discussed by Wicksell, Aftalion, Schumpeter, Hawtrey, Robertson and Keynes, now occupies a dominant position in monetary analysis.

The great popularity of the income and expenditure approach derives not from the substance of this theory but from its logical framework.

The theory whose roots go back at least as far as the 18th century, is stated in terms of such basic eeonomic operations as producing goods, receiving an income, spending for consumption goods, saving, investing, creating and destroying money, and hoarding and dishoarding. Therefore, it seems more closely related to human decisions and actions. It is by far the most useful approach available for analyzing the monetary aspects of business cycles.

L.V. Chandler

INCOME METHOD OF ESTIMATING NATIONAL INCOME (*Economics of development)

A method which adds up the wages of workers, interest on loans and securities plus corporate profits plus the net income of unicorporated business units.

Das and Chatterji

INCOME OF A PERSON (*Theory of value)

The value of the goods and services which an individual can consume during a given period and still have the same amount of wealth (assets) at the end of the period as at the beginning.

(Income is the amount that an individual *can* consume, not necessarily the amount that he does consume).

A.L. Meyers

Income of a person=Consumption+increase in net wealth.

Compiler

INCOME OF PUBLIC AUTHORITY (*Public finance)

In the broad sense, it includes all "incomings" or "receipts". In the narrow sense, it includes only those receipts which are included in the ordinary conception of revenue.

Hugh Dalton

INCOME SENSITIVITY (*Theory of value)

The income sensitivity of a commodity in a period of time is measured by calculating the percentage change in dollar expenditures associated with a one-per cent change in disposable income in the same period.

D.S. Watson

INCOME TAX (*Public finance)

It takes two forms: (i) personal income tax, and (ii) corporation income tax, i.e. income tax on business firms. In India income tax was introduced on 31, July 1860 by Sir James Wilson in order to make good the losses suffered by the Government on account of the Military Mutiny of 1857.

The present law of income tax is contained in the Income-Tax Act, 1961 (which came into force in April, 1962) as amended up-to-date.

Compiler

After a corporation has paid all its expenses and reckoned its annual income, it must pay part of its income to the federal government. That is corporation income tax.

P.A. Samuelson

Nearly all countries assess income taxes on corporations as well as on individuals. Corporation income taxes apply to net profits, computed as the excess of receipts over allowable costs, but differ widely in detailed provisions and rates.

In the United States the federal corporation income tax was adopted in 1909.

A personal income tax is a tax that is levied on individuals or family units and that is computed on the basis of income received.

The first country to enact a general income tax was Great Britain in 1799. Norway introduced it in 1892.

Encyclopaedia Britannica

INCOME TERMS OF TRADE (*International economics)

Barter terms of trade multiplied by the quantity of exports.

Meier and Baldwin

Income terms of trade is one of the different concepts of terms of trade, the others being: (i) gross barter terms of trade, (ii) net barter or commodity terms of trade, (iii) single factoral terms of trade, (iv) double factoral terms of trade; and (v) utility terms of trade.

Income terms of trade relate to the ratio of exchange between commodities.

H.G.P. Srivastava

Income terms of trade bring into picture volume changes of trade in addition to price changes. They are an index of the export gains from trade or of the total gain from trade. To calculate the income terms of trade (Px/Pm) we multiply the commodity terms of trade with the index of the volume of exports (Qx). The formula for income terms of trade is:

$$\frac{QxPx}{Pm} \times 100$$

K.P.M. Sundharam

INCOME THEORY (*Theory of value)

One of the two main branches of modern economic theory, the other being price theory or micro-economics.

Another name for income theory is macro-economics. It explains the level of total production and why the level rises and falls. Income theory is based on the ideas of the best-known economist of the twentieth century, J.M. (Lord) Keynes of Cambridge University.

Donald S. Watson

INCOME VELOCITY OF CIRCULATION (*Monetary economics)

The ratio of consumer's outlay to cash balances in a given time.

R.G. Hawtrey

INCOMPATIBLE STATE INTERVENTION (*Economics of planning)

Ropke distinguishes between compatible and incompatible state intervention. By incompatible state intervention he means too much of

state interference which disturbs the mechanism of free market. According to him planning makes use of this type of intervention.

(By compatible state intervention Ropke means state interference only to an extent that does not disturb the working of a free market economy).

Compiler

INCONVERTIBLE PAPER MONEY (*Monetary economics)

When a county's currency is not redeemable in either gold or silver, it is said to have an inconvertible paper money system, or a nominal currency.

Rollin G. Thomas

INCONVERTIBLE STANDARD (*Monetary economics)

A monetary standard in which the nation's monetary unit is not kept at a constant value in terms of any metal.

L.V. Chandler

INCREASE IN DEMAND (*Theory of value)

When more quantity of a thing is bought at the same price or when the same quantity is bought at a higher price, there is said to be increase in demand.

The term is to be distinguished from extension of demand. Extension of demand means rise in demand due to lower price. In the case of increase, the consumer plays an active part while in the case of extension, the price.

Compiler

When we say that a person's demand for anything increases, we mean that he will buy more of it than he would before at the same price and that he will buy as much of it as before at a higher price.

Alfred Marshall

INCREASING COST INDUSTRIES (*Theory of value)

In increasing-cost industries, external diseconomies prevail. The expansion of such industries causes the cost curves of the firms to be pushed up. The rise in costs makes the long-run supply curve slope upward to the right.

D.S. Watson

INCREMENTAL COST (*Theory of value)

Marginal cost,

Compiler

The addition or increment to total cost involved in expanding or contracting output by one unit.

G.L. Bach

INCREMENTAL SAVING RATIO (*Economics of development)

Marginal propensity to save.

Ragnar Nurkse

INDEPENDENT DOMESTIC ECONOMY (*Economics of development)

An economy where production is carried on for one's own use, and where there is the absence of exchange.

Compiler

INDEPENDENT TREASURY (*Monetary economics)

A system of subtreasuries for the receipt and payment of money on behalf of the government.

W.W. Haines

INDEPENDENT WORKER (*Economics of labour)

One who works on his own account and not for an employer.

F. Benham

INDEX NUMBERS (*Monetary economics)

The series of numbers indicative of changes in a given price level.

J.M. Keynes

Mathematical device by which changes in the price levels are measured.

Frederic Benham

A list of numbers showing the relative change over time of a given series (such as prices) by relating the value of the series in each year to a convertible value of 100 in an arbitrary chosen base period.

W. W. Haines

Index numbers are meant to study the changes in the effects of such factors which cannot be measured directly.

A. L. Bowley

An index number is a relative measure of the central tendency of a group of items.

D. N. Elhance

Chroicom preciosum written by Bishop Fleetwood in 1707 is the earliest treatise on index numbers. However, the use of index numbers became extensive since 1860,

Although mainly employed in connection with the measurement of changes in price, the technique of index numbers is of late extensively used to find out changes in other variables such as volume of production, trade, employment, security prices, foreign trade etc.

Among those who have done much work on index numbers, mention may be made of F. Y. Edgeworth, W. C. Mitchell and Irving Fisher.

Compiler

Index numbers were first used to measure the price or fall of prices and the term itself was coined in this connection. In 1838 Porter used the term index prices. In 1869 the *London Economist* used the term total index number. Jevons took over the term index number and it quickly came into force.

International Encyclopaedia of Social Sciences

INDIAN COUNCIL OF AGRICULTURAL RESEARCH (ICAR) (*Economic research)

The national level agricultural agency involved in promoting agricultural research. It was established as a registered society on July 16, 1929 on the recommendation of the Royal Commission of Agriculture, 1926. Before independence, the ICAR was known as Imperial Council of Agricultural Research to guide and co-ordinate agricultural research.

The ICAR, through its 33 central research institutes, *adhoc* projects, and agricultural universities is concerned with improvement in economic crops, animals and related matters. It is the second biggest agricultural research organisation in the world in terms of the number of scientists employed by it.

Compiler

INDIAN NATIONAL TRADE UNION CONGRESS (INTUC) (*Economics of labour)

Founded in May, 1947 it is one of the four central all-India trade union organisations. It "aims at establishing an order of society which is free from hindrances to an all-round development of its individual members; which fosters the growth of human personality in all its aspects" (V. V. Giri).

It further aims at progressively eliminating social, political and economic exploitation of labourers and inequality and anti-social concentration of power in any form.

Compiler

INDIAN STATISTICAL INSTITUTE (ISI) (*Statistics)

An internationally renowned institute founded at Calcutta in 1931 by the late Professor P. C. Mahalanobis,

It conducts high level research in statistics, trains and executes large-scale project works. *Sankhya* is the official organ of the Institute.

Prof. Mahalanobis was the founder-director of the INS.

The INS, one of the most important compilers and sources of up-to-date statistical information in India, was recognised by the Government of India into an institution of national importance by a Central Act in 1957 and was empowered to award post-graduate degrees in statistics.

Compiler

INDIFFERENCE CURVE (*Theory of value)

The locus of all exchanges (or substitutions) of one commodity for another which give to the individual the same satisfaction.

F. Y. Edgeworth

Curve which describes the tastes of an individual.

G. J. Stigler

A geometrical line which represents a level of satisfaction. The line shows all those combinations of two goods which give the same satisfaction to the consumer.

A. W. Stonier & D. C. Hague

The indifference curve shows all combinations of two commodities that give the same satisfaction to the consumer. The indifference curve is convex because of the diminishing marginal rate of substitution between the two commodities.

D. S. Watson

INDIFFERENCE CURVE TECHNIQUE (*Theory of value)

The indifference curve analysis or indifference preference hypothesis is one among the three principal approaches to the demand theorem, the other two being marginal utility analysis of Alfred Marshall and revealed preference theory of P. A. Samuelson.

Indifference curve analysis, a mathematical device designed as an improvement over Marshallian utility analysis was invented by F. Y. Edgeworth in his *Mathematical Psychics* (1981). The technique was independently discovered by Irving Fisher in 1982 in his *Mathematical Investigations in the Theory of Value and Prices*. Then came in 1906 Vilfredo Pareto of Italy with his *deconomie Politique*. Seven years later, there came W. E. Johnson with his paper "The Pure Theory of Utility Curves". published in *Economic Journal* (Dec. 1913).

In 1915 Eugen E. Slutsky brought out his essay on the "Theory of the Budget of the Consumer". In 1934 J. R. Hicks and R. G. D. Allen of England published a paper. "A Reconsideration of the Theory of Value". Prof. Hicks reproduced the 1934 paper with certain modifications in his *Value and Capital* (1939).

Edgeworth used the device to show the possibilities of exchange between two persons. Fisher attempted to construct a theory of consumer's demand but he could not go beyond examining the question of substitutes and complementary goods. Both Edgeworth and Fisher believed in Marshallian cardinal measurement of utility. Pareto based his demand theorem on indifference curves. He however, started as cardinalist and ended as ordinalist. While Edgeworth assumed the existence of ophelmity (i.e. utility) and from it deduced the indifference curves. Pareto instead considered as empirically given the indifference curves and deduced from them all that was necessary for the theory of equilibrium without having recourse to ophelmity. W. E. Johnson, showed that in order to define consumer's equilibrium and to derive the law of demand there was no need of assuming cardinal measurement of utility. He, thus, strengthened the ordinal utility hypothesis.

Slutsky attempted to derive the theorem completely independent of psychological assumptions and philosophical hypotheses. His utility function was an objective scale of preferences. He denied the role of introspection. He was the first to discover that price effect could be split into two component parts—income effect and substitution effect.

Hicks and Allen completely bombarded Marshallian cardinal utility analysis and enthroned ordinal utility analysis. They split up the effect of a change in price into income effect and substitution effect. It was Hicks's superb exposition and elaboration of it that gave indifference curve analysis its present unique position in Economics.

Since 1939 when *Value and Capital* appeared, the theory has been widely accepted. Hicks brought out *A Revision of Demand Theory* (1956) but surprisingly none of 22 diagrams drawn in the book contains indifference curves.

In the words of George J. Stigler, indifference theory assumes "that the consumer is able to decide whether two combinations of goods are equivalent or whether he prefers one to the other ; but it is not assumed that he can tell by how much he prefers one combination to the other".

According to indifference curve analysis, the consumer is in equilibrium at the point at which the indifference curve is convex and tangential to the budget line. In other words, the consumer is in equilibrium at that point at which the marginal rate of substitution is equal to the ratio of the prices of the two goods.

Compiler

The technique of indifference curve was invented by Edgeworth and refined by Pareto and Fisher. But it had never become popular and subsequently fell into disuse. It was revived by A. L. Bowley in his *Mathematical Groundwork* (1924). Bowley did not, however, explore its implications for the measurability of utility. In 1934 Hicks and Allen showed that indifference curves can be employed to reconstruct the theory

of consumer behaviour on the basis of ordinal utility, only to discover that as early as 1913 and 1915 Johnson and Slutsky had independently demonstrated the same results.

The indifference curve technique assumes that the individual can consistently rank his preferences and moreover, that he can discern "indifference" between two given alternatives at a given time.

Mark Blaug

INDIFFERENCE MAP (*Theory of value)

Indifference map of a consumer is a set of indifference curves. It represents a consumer's tastes and preferences between different combinations of them. In other words, it portrays consumer's scale of preferences.

Compiler

Indifference map which corresponds to an entire system of indifference schedule, provides a complete description of consumer's tastes for two commodities.

D. S. Watson

INDIFFERENCE SCHEDULE (*Theory of value)

A schedule of various combinations of goods that will be equally satisfactory to the individual concerned.

A. L. Meyers

A list of combinations of two commodities that a consumer is indifferent to the combinations.

D. S. Watson

When indifference schedule which is an arithmetical device is translated into geometry, it takes the form of indifference map.

Compiler

INDIRECT MONEY BURDEN (*Public finance)

It arises when a tax-payer is forced to part with a larger amount than the rate of tax warrants.

Compiler

INDIRECT REAL BURDEN (*Public finance)

It refers to the reduction in the consumption of a commodity resulting from the imposition of a tax on that commodity.

Compiler

INDIRECT TAX (*Public finance)

A tax which is demanded from one person in the expectation and with intention that he shall indemnify himself at the expense of another.

E. H. Plank

Indirect tax is one which is imposed on one person, but paid partly or wholly by another, owing to a consequential change in the terms of some contract or bargain between them. It is a tax which can be shifted or passed on.

Rugh Dalton

Taxes which are paid indirectly by the final purchasers of the goods on which they (taxes) are levied.

Raymond Bye

Taxes are broadly classified into direct and indirect taxes. J.S. Mill did so by asking whether a tax was actually paid over by the persons on whom the burden fell or not. According to him, direct taxes could be levied on expenditure as well as income.

Now-a-days, taxes are distinguished between direct and indirect taxes on the *basis* of assessment rather than *point* of assessment. "Those taxes which are based on the receipt of income are termed direct, whereas those levied on expenditure are termen indirect". Thus income tax, capital gains tax, gifts tax, professional tax etc. are direct while excise duties, customes, stamp duties, sales tax etc. are indirect.

A.R. Prest finds fault with the classification of taxes into direct and indirect taxes.

To Philip A. Taylor, the terms 'direct' and 'indirect' taxes are finally distinguishable in meaning only in terms of shiftability. He says "Direct taxes are not shifted, while indirect types are . . . . To denominate particular taxes as direct or indirect is to oversimplify the question of incidence".

Indirect taxes are also called commodity taxes.

Compiler

INDIVIDUAL CONSUMER (*Theory of value)

The term usually refers to a family.

G.J. Stigler

INDIVIDUAL DEMAND (*Theory of value)

An individual demand for any good is a schedule of the respective quantities of that good which he is ready to buy at all possible prices.

Fairchild, Buck and Slesinger

INDIVIDUAL DEMAND CURVE (*Theory of value)

It means not the demand curve of an individual buyer, but the demand curve for the product of an individual firm. It is frequently convenient to refer to a demand curve as the average revenue.

Joan Robinson

INDIVIDUAL DEMAND SCHEDULE (Theory of value)

The list showing the quantities of a good which an individual consumer is ready to buy at different prices, *ceteris paribus.*

Compiler

INDIVIDUAL PROPRIETORSHIP (*Industrial economics)

Single or sole proprietorship; one-man concern.

This form of business organization in the commonest in the poor countries.

Compiler

INDIVISIBLE FACTORS OF PRODUCTION (*Theory of value)

Also called in short 'indivisibilities', the term refers to those productive factors which cannot be divided into small units.

These factors work more efficiently at a fairly large output. A manager and a plant, for example, are indivisible factors production, for they cannot be choffed in half.

Compiler

INDIVISIBLE GOODS (*Theory of value)

The commodities that are bought one at a time at long intervals or goods that are bought once in a life-time.

Most indivisible commodities are durable consumer goods.

D.S. Watson

INDIVISIBLE PLANT (*Theory of value)

An indivisible plant as distinguished from a divisible plant, has a single complex of equipment the whole being designed to produce one small range of output. Examples; blast furnances, refineries and distilleries. (A divisible plant consists of several complexes of more or less indentical equipment. Examples: textile mills ane hydro-electric plants).

D.S. Watson

INDUCED INVESTMENT (*Economics of development)

It means that anything which increases national income is likely to be good for the capital goods industries.

P.A. Smuelson

Induced investment in contrast to autonomous investment is induced by profit motive. Also referred to as profit motivated investment, it occurs in response to actual or anticipated increases in outlays for specific existing products. Among the important causes of induced investment are income gains and population growth which lead to a greater demand for goods and services. In general, therefore, induced investment is an expenditure for additional equipment in order to produce greater quantities of a given good or service.

M.L. Seth

INDUCTIVE METHOD (*Economic methodology)

There are two methods of investigation available to economists: (i) deductive method, and (ii) inductive method.

Inductive method mounts from the particular to the general, i.e. it begins with the observation of particular facts and then mounts up with the help of reasonings founded experience so as to formulate laws and theorems on the basis of observed facts.

Also known as historical, empirical and *a posteriori* method, it is strongly advocated by the Historical School.

Compiler

INDUSTRIAL BANK (*Monetary economics)

A bank which meets the long-term capital needs of industries. These banks are to provide credit in order to enable the industrial undertakings to their block and working capital.

A.K. Basu

INDUSTRIAL CIRCULATION (*Monetary economics)

Deposits used for the purpose of industry.

J.M. Keynes

The volume of goods and services changing hands for money.

Newcomb

INDUSTRIAL CONCERN (*Industrial economics)

Any public limited company or co-operative society, incorporated by an Act of legislature and registered in India, engaged in the manufacture, or in mining or in the hotel industry or in the generation of electricity or any other form of power.

The Industrial Finance Corporation Act, India

INDUSTRIAL CREDIT (*Monetary economics)

The debts of manufacturers and other primary producers.

R.P. Kent

INDUSTRIAL CREDIT AND INVESTMENT CORPORATION OF INDIA (I.C.I.C) (*Economic history)

A private limited company incorporated in India with its headquaters at Bombay in January 1955 with the authorised capital of Rs. 25 crores on the advice of the three-man Mission sponsored by the U.S. Government and the World Bank.

Its main function is to encourage industrial development in the private sector by helping the establishment of new industries or the expansion or rehabilitation of existing concerns.

Compiler

INDUSTRIAL DEMOCRACY (*Economics of labour)

The term coned as far back as 1897 by Sydney and Beatrice Webb to describe the workings of democracy within the trade unions themselves.

The term refers to demand for "the progressive elimination from the control of industry of the private capitalist, individual or joint-stock and setting free of all who work the services of the community".

Compiler

INDUSTRIAL DEVELOPMENT BANK OF INDIA (I.D.B.I.) (*Economic history)

It was set up in July 1964 with headquarters at Bombay (in the R.B.I. Building) under a special statute, viz., the Industrial Development Bank of India Act, 1964, with an authorised capital of Rs. 50 crores.

It is both an apex institution coordinating the operation of banks and other financial institutions providing term finance to industry, and an agency providing direct financial assistance by filling in the gaps that remain after taking into account the assistance available from other institutions.

It has been conceived as a financing as well as development agency for locating and filling up the gap in the industrial structure. A wholly owned subsidiary of the Reserve Bank of India, the I.D.B.I. has been endowed with substantial financial resources and considerable operational flexibility.

The operations of the I.D.B.I. fall into two broad groups: (i) assistance to other financial institutions, and (ii) direct assistance to industrial concerns either on its own or in participation with other institutions.

The Governor of the R.B.I. is the ex-officio chairman of the I.D.B.I.

Compiler

INDUSTRIAL DISPUTE (*Economics of labour)

Dispute between the employers and the workers over wage and/or other conditions of labour. It is resolved either by conciliation or arbitration.

Industrial dispute is a feature of capitalist civilization.

Compiler

INDUSTRIAL ESTATE (*Industrial economics)

A tract of land where necessary industrial utilities like water, gas, electricity, access roads and rail connections are provided and where factory buildings of standard types and perhaps a number of common services may also be provided.

S. Nanjundan, A.E. Robinson and E. Staley

The notion of industrial estate originated in the West during the latter half of the 19th Century. It was desingned to overcome the

scarcity of industrial land near the urban centre and to develop backward areas. India a pioneer in the programme made a beginning in 1955.

Compiler

INDUSTRIAL FINANCE CORPORATION OF INDIA (I.F.C.I.)
(*Economic history)

On the recommendations of the Central Banking Enquiry Committee and the working party on the Mobilization of Domestic Capital of ECAFE, the I.F.C. was established in July 1948 under an Act of Indian Parliament with headquarters at New Delhi for making long-term credit available to the industrial concerns in the private sector particularly in circumstances where normal financial assistance by banks is found to be deficient or inappropriate.

Its authorised capital is Rs. 10 crores.

Compiler

INDUSTRIAL HAZARDS (*Economics of labour)

Those dangers to life, limb and health which arise out of the process of production.

I.M. Rubinow

INDUSTRIAL HISTORY (*General economics)

Another name suggested by Lewis H. Haney for Economic history.

Compiler

INDUSTRIAL POLICY (*Industrial economics)

The term, 'Industrial Policy' refers to Governments Policy towards the establishment of industries, their working and management. It includes all those principles, regulations, rules etc. which would influence the industrialisation of the country and also nationalization of industries.

S. Shankaran

INDUSTRIAL RELATIONS (*Economics of labour)

It is a broader term than "labour problems" and it includes all aspects of labour in the economy-practices and policies as well as problems.

Richard A. Lester

INDUSTRIAL REVOLUTION (*Industrial economics)

It refers to the gigantic process of substituting machinery and other capital goods for labour.

F. Benham

The transition from handicraft production to water or steam powered machine production.

Anatol Murad

By this, Marxism means the gradual transformation of the pre-capitalist way of production into the capitalist.

Ludwig Von Mises

It is the name given to those economic and technological developments which gathering strength and speed during the 18th century produced modern industrialisation.

International Encyclopaedia of Social Sciences

Industrial Revolution is a general term first used to describe the far-reaching economic changes in England after the middle of the 18th century. It is called a revolution because it wrought fundamental changes in the way of life and social relationships of affected peoples.

The term became quite popular after the publication of the late Arnold Toynbee's *Lectures on the Industrial Revolution* (1884). It is, therefore, suggested by some like Robert Lekachman that the term was coined by Toynbee. But, according to William Rappard, the phrase was used previously by Karl Marx, J.S. Mill and F. Engels. It is also contended that it was French writer Blanqui who used the term much earlier.

The following are the principal inventors and inventions of the English Industrial Revolution.

Textiles Industry

John Kay—fly shuttle (1733)
John Wyatt—roller spinning (1733)
Richard Arkwright—water frame (1769)
James Hargreaves—spinning jenny (1770)
Samuel Crompton—spinning mule (1779)
Edmund Cartwright—powerloom (1785)

Iron and Steel Industry

Abraham Darby—coke (1703)
Benjamin Huntsman—crucible cast steel (about 1750)
Henry Cort—puddling process (1784)

Steam Engine

Thomas Newcomen—Newcomen
James Watt—separate condenser (1769)

Compiler

The beginnings of modern industry which brought into being the factory system are referred to in history as the industrial revolution. This took place in England from 1770 to the early years of 1800's in the U.S. it dates to about 1790.

Srivastava, Nigam, Sahai and Banerjee

INDUSTRIALISATION (*Industrial economics)

A process in which changes of a series of strategical productions are taking place. It involves those basic changes that accompany the mechanisation of an enterprise, the building of a new market and the exploitation of new territory. This is in a way a process of 'deepening' as well as 'widening' of capital.

Pei-Kang Chang

INDUSTRY (*Theory of value/Industrial economics)

A group of firms or segments of firms, closely related in the competitive process by reason of great substitutably of their respective products and distinguished from other firms by a gap in the range of substitute products.

Kenneth E. Boulding

Any group of firms producing a single commodity.

Mrs Joan Robinson

In everyday sense, a group of firms producing broadly analogous products or working on a common raw material. In theory it is conceived of as an aggregate of firms producing identical products.

A. Beacham

The term is rather loosely used to include any of the following groups of enterprises :

(i) Those making a single product or closely related groups or groups of products or,

(ii) Those which use a common raw material or,

(iii) Those engaged in similar process or production.

Raymond Bye

A branch of commerce concerned with the production of wealth and would include agriculture, fishery, forestry, manufacture etc.

Davar

The business of maintaining the normal process of current output, distribution and exchange and paying the factors of production their incomes for the various duties which they perform the first beiginning of production to the final satisfaction of the consumer.

J.M. Keynes

INELASTIC DEMAND (*Theory of value)

If a given change in the price of a commodity or money income of the consumer causes a less than proportionate change in the quantity

demanded of this commodity, the demand for the commodity is said be inelastic of less elastic.

Compiler

INFANT ECONOMY (*Economics of development)

A poor country's economy.

Meier and Baldwin

'INFANT INDUSTRY' ARGUMENT (*International economics)

The best known and most legitimate argument for protection is the infant industry argument. This argument for tariffs was clearly formulated in America as early as 1790 by Alexander Hamilton, and later by Frederich List in Germany.

An infant industry tariff is intended to remain (temporarily) in place only so long as it is necessary for the industry or firm in question to acquire the skill which will enable it to compete with producers in the rest of the world on a basis no more favourable to it than to the domestic producers of other products.

H.G.P. Srivastava

According to this argument, just as an infant needs protection, newly started industry at home needs protection against the competition of foreign giants i.e. well established industries so as to be self sustaining. Once the industry matures, the protection might be lifted.

The argument received support in the hands of Marshall, Mill, Taussig, and Clark. Mill wrote, "of the formal validity of List's argument, there is no longer any dispute among the economist".

Compiler

INFERENCE (*General economics)

Deduction or conclusion.

Compiler

INFERIOR GOOD (*Theory of value)

A good less of which is consumed at a higher income. Examples: Dalda, jowar, jaggery etc.

Giffen good is a special type of inferior good.

INFINITELY ELASTIC DEMAND (*Theory of value)

When a small rise in price causes the quantity demanded of the good to fall to zero and a small reduction in price results in an infinite increase in the quantity demanded of the good, the demand for the good is said to be infinitely or perfectly elastic.

Compiler

INFINITELY INELASTIC DEMAND (*Theory of value)

When the quantity demanded of a commodity remains the same irrespective of any rise or fall in the price of commodity in question, the demand for the commodity is said to be elastic.

Compiler

INFINITELY INELASTIC SUPPLY (*Theory of value)

When the quantity of a good supplied remains the same, irrespective of any rise or fall in the price of the good in question, the supply of that good is said to be infinitely or perfectly inelastic or zero elastic.

Compiler

INFLATION (*Monetary economics)

The issue of too much money.

R.G. Hawtrey

Too much money chasing too few goods.

Hugh Dalton

"The process of making additions to credit not based upon a commensurate increase in the production of goods".

A state of disequilibrium in which an expansion of purchasing power tends to cause or is the effect of, an increase of the price level.

Paul Einzig

In Keynesian sense, a situation in which output ceases to be responsive to further increase in effective demand, and as a result prices only and not output, rise.

Dudley Dillard

A time of rising prices for commodities and factors of production.

P.A. Samuelson

A state in which the value of money is falling, i.e. price are increasing.

Geofery Crowther

"A disproportionate and relatively sharp and sudden increase in the quantity of money relatively to goods available for purchase".

Quoted

Excessive total spending.

Abba P. Lerner

A rise in the general level of prices.

W.W. Haines

A rise in the number of individual prices significant enough to cause the general index to rise.

P.E. Taylor

An increase in the circulation of money not offset by an equal increase in the volume of goods entering into trade.

Raymond Bye

Inflation may be partial or pure. Partial inflation signifies any increase in money and prices that does not result in increased output of goods. The second denotes any increase in prices that occurs after full employment has been attained.

Arthur D. Gayer and W.W. Rostow

A condition of persistent rise in general price level.

NCAER (India)

A persistent upward movement in the price level regardless of cause.

R. P. Kent

A situation in which the general level of prices persistently increases on account of too much money supply in relation to the supply of goods and services.

Inflation is both the cause and effect of rising prices.

Inflation is classified in numerous ways. The samples are: (1) creeping inflation, (2) walking inflation, (3) running inflation, (4) deficit-induced inflation, (5) profit-induced inflation, (6) War inflation, (7) peace time inflation, (8) sporadic inflation, (9) comprehensive inflation, (10) open inflation, (11) suppressed inflation, (12) currency inflation, (13) credit inflation, (14) price inflation (15) profit inflation, (16) demand pull inflation etc., etc.

Compiler

INFLATIONARY GAP (*Monetary economics)

"An excess of anticipatory expenditure over available output at base prices".

The sum by which money incomes have to be reduced in order that the expected volume of output (plus imports less exports) can be bought at prevailing prices.

OR

The amount by which voluntary saving would fall short of planned investment including public investment. This amount, therefore, has to be taken in the form of increased taxation in order to prevent a general rise in prices.

F. Benham

The excess of income spending over that required to keep the factors of production fully employed. In other words, a situation in which the pressure of demand tends to raise the price level.

P.A.S. Taylor

If full-employment saving falls short of scheduled investment at full employment, there is said to be an "inflationary gap".

P.A. Samuelson

It refers to the excess of investment over savings in a full employment economy. It is the value of excess demand for goods and services over the goods and services that can be produced with full employment.

For exmple, if the demand for goods and services in the country is Rs. 550 crores, but actual output at full employment is only Rs. 500 crores, then the inflationary gap is measured by Rs. 50 crores This Rs. 50 crores surplus purchasing power can only lead to a rise in the price-level.

M.L. Seth

INFLATIONIST (*Keynesian economics)

Lord Keynes is often described as an inflationist because he preferred inflation to deflation. But Dudley Dillard says that this description is misleading. Keynes preferred inflation to deflation because of the two, inflation is a lesser evil.

Compiler

INFORMAL AGREEMENT (*Industrial economics)

Also called "Gentlemen's agreement" the term refers to an agreement added by the members of a traded association to conform to certain trade practices.

Compiler

INFRAMARGINAL (*Theory of value)

Intra-marginal.

Compiler

INFRAMARGINAL FIRM (*Theory of value)

Firms other than the entrants at each price where new entries occur.

Fellner

INFRAMARGINAL LAND (*Theory of value)

Better than marginal or no rent land.

Compiler

INFRASTRUCTURE (*Economics of development)

The term refers to an economy's capital in the form of roads, railways, water supplies, educational facilities, health services etc. without which investment in factories, machinery, tools etc. cannot be fully productive .... The absence of infrastructure restrains the rate of economic growth of underdeveloped countries.

P.A.S. Taylor

It is also referred to as social overhead capital.

It includes such things as transport and communications, power, irrigational facilities etc. The level of economic activity in a country depends upon its infrastructure.

M.L. Seth

INHERITANCE TAX (*Public finance)

The death duty on the share of the property of the deceased received by each heir.

Das and Chatterji

A levy made on the occasion of the transfer of property at or in connection with the death of the owner. It may take the form of a tax on the estate as a whole or on the respective shares of the beneficiaries or on both.

International Encyclopaedia of Social Sciences

INHERITED CAPITAL (*Public finance)

Estates of the deceased.

F. Benham

INLAND BILL (*Monetary Economics)

A commercial bill drawn and payable in one country only. In some ways it is similar to a promissory note.

P.A.S. Taylor

INNOVATING ENTREPRENEURSHIP (*Industrial economics)

Clarence Danhop classifies entrepreneurs into the following types:

1. Innovating entrepreneur,
2. Imitative entrepreneur,
3. Fabian entrepreneur, and
4. Drone entrepreneur.

Innovating entrepreneurship is characterised by aggressive assemblance of information and the analysis of results deriving from novel combination of factors. Men in this group are generally aggressive in experimentation and exhibit celerity.

Williamson and Buttrick

INNOVATION (*Business cycles)

Carrying the inventions into actual performance or in common terms 'exploiting them'.

J.A. Estey

Any new way of doing things that changes methods of production. It may be mechanical invention, the development of new territories, the opening of new markets, changes in the forms of business organisation (e.g. the rise of chain stores), or new methods of management.

J.A. Schumpeter

It may take any of the following forms:

(i) the introduction of a new good, (ii) the use of a new method of production, (iii) the opening of a new market, (iv) the conquest of a new source of raw material supply or (v) the reorganisation of any industry.

G.M. Meier and R.E. Baldwin

Innovation is a subject which is the 'pet' of many great economists, *viz.*, Bohm-Bawerk, R.F. Harrod, J.R. Hicks, Karl Marx, J.S. Mill, David Ricardo, Adam Smith, Joan Robinson, Knut Wicksell, J.A. Schumpeter etc.

The term 'innovation' *inter alia* has been applied to explain the nature of business cycles and profits.

Compiler

Innovations are such changes in production functions, i.e., in the schedules indicating the relations between the input of factors of production and the output of products which make it possible for the firm to increase the discounted value of the maximum effective profit obtainable under given market conditions.

Oscar Lange

INNOVATION, THEORY OF BUSINESS CYCLES (*Business cycles)

This well-known theory was developed by the late Joseph A. Schumpeter of Harvard University in his *Business Cycles* (1939). In this theory he has demonstrated that technological changes can be potent cause of cyclical business fluctuations.

According to this theory, trade cycles come about becasue at some times there are aggressive entrepreneurs who introduce innovations. Innovations necessitate new investments and these investments in turn spell prosperity. Waves of prosperity are followed by lulls which mean depression.

Compiler

INUNDATION CANAL (*Agricultural economics)

The irrigation canal which receives water only when the river is in the spate.

Das and Chatterji

INPUT (*Theory of value)

All of the things bought by the firm—fuel, raw material etc. as well as labour and capital.

D.S. Watson

Something which is bought for the enterprise (while an output is something sold by it).

J.R. Hicks

The term is broader than the term "factors of production". It represents all the things used by a firm in producing a commodity.

Compiler

INPUT-OUTPUT ANALYSIS (*Economics of development)

It is an attempt to apply the economic theory of general equilibrium......to an empirical study of the interrelations among the different parts of a national economy.

W.W. Leontief

Input-output analysis is the creation of professor Wassily W. Leontief, a mathematical economist and Nobel laureate of Harvard University It is the statistical measurement of the inputs and the outputs of all the industries taken together in an interdependent system of commodity flows. It has been developed far, lending itself well to planning for mobilization and to planning for the economic development of countries and regions.

D.S. Watson

"The input-output analysis refers to that analysis which deals with the interrelationship between an industry's or an economy's given output of goods and services needed to achieve that given output of goods and services".

Quoted

Also called "inter-industry analysis", input-output analysis is used to analyse inter-industry relationship in order to understand the interdependencies and complexities of the economy and thus the conditions for maintaining equilibrium between supply and demand.

It tells us that the inputs of one industry are the outputs of another industry and *vice versa*, so that ultimately their mutual relationships lead to equilibrium between supply and demand in the economy as a whole.

The analysis being based on empirical investigation concerns itself with general equilibrium and technical problems of production.

M.L. Jhingan

Input-output analysis originated in the U.S. between 1930 and 1940 in the, work, *The Structure of the American Economy*, 1919-1939 (1941) of the economist of Russian origin Wassily Leontief. The method of analysis has the purpose of determining what repercussions a change in the level of production in one sector of the economy will have on all other sectors.

Leontief revised his model in 1953.

Alessandro Cigno

One of the powerful tools of quantitative economic analysis. It was first initiated by professor W.W. Leontief, essentially, as an approach of national accounts for inter-industry transactions and was applied to analyse the structure of production in the American economy. Since then this techinque has found its applications in the fields of international trade theory, inter-regional analysis, national planning for allocation of resources, income distribution and other fields

V.R. Panchamukhi

INPUT-OUTPUT TABLEAU (*Economics of development)

An ingenious table devised by professor Wassily Leontief of Harvard for showing the balanced relationships in the economy as a whole. This important inter-industry tableau is a modern-day realization of the 18th century dream of the Physiocrat, F. Quesnay who first envisaged the *Tableau Economique* or circular flow of economic life. A large-number of countries including India have computed this table as an amplification of their national income data and as a possible aid in developmental planning. It X-rays the economy's structure and helps national plan.

In the table, Leontief divides the whole economy into two sectors "inter-industry sectors" and "final-demand sectors".

The table relating to the economy as a whole in a particular year shows the value of the flows of goods and services between different productive sectors especially inter-industry flows.

(See also *Leontief W.W.*)

Compiler

INSCRIBED STOCK (*Monetary economics)

A Government security. It is so called as the name of the stockholder is inscribed or recorded in the Public Debt office.

A.K. Basu

INSTABILITY (*General economics)

A quantitative concept involving degrees and rates of departure from some norm.

or

Departure from full employment at stable price levels.

P.E. Taylor

INSTITUTIONAL ECONOMICS (*History of economic thought)

Institutional economics which is closely related to Historical economics is concerned with the study of institutions—economic, social, political and others and their place in the economy. Economic institutions include price system, private business enterprises etc. Social institutions comprise monogamic family, polygamy, eduction, science, religion etc. Political institutions are: elections, separation of powers *et al.*

According to the institutionalists, human action is guided not so much by reason as by habit and customs, i.e. institutions which are defined as accepted or habitual ways of doing things. This school holds that the part which the institutions play in economic behaviour should be the primary concern of economists.

Compiler

Institutional economics as the term is narrowly understood, refers to a movement in American economic thought associated with such names as Thorstein Veblen, W.C. Mitchell and John Commons.

Veblen applied an inimitable brand of interpretative sociology to the working creed of businessmen; Mitchell devoted his life to the amassing of statistical data, almost as an end in itself; and Commons analyzed the workings of the economic system from the standpoint of its legal foundations.

Mark Blaug

INSTITUTIONAL FINANCE (*Monetary economics)

The term as opposed to individual finance, refers to credit made available by financial institutions such as banks, insurance companies and corporations.

Compiler

INSTITUTIONAL INVESTOR (*Monetary economics)

An institution that invests, as opposed to an individual who invests. Banks, insurance companies and trusts are institutional investors.

P.A.S. Taylor

INSTITUTIONALISATION OF SAVINGS (*Monetary economics)

The term is applied to at least two types of saving. The first is that in which the individual or household does not directly make the saving

decision and does not directly dispose of the funds saved. Rather some institution makes the saving decision and determines the use to which the saving will be put. Secondly, the term is applied to the situation in which the saver does make his own saving decision but places his money savings at the disposal of some financial intermediary that determines the ultimate uses to which the funds may be put.

Lester V. Chandler

INSTRUMENTS (*Theory of value)

Goods which are complete in themselves and which render a succession of services over a period of time. Houses, factories, machines, automobiles, domestic animals are the examples. These things are frequently called "fixed capital" since their physical form does not change significantly in the course of their service.

K.E. Boulding

INSURANCE (*Monetary economics)

An arrangement whereby one party (insurer) agrees in return for a premium to provide indemnity for another party (insured) in the event of some specified loss. Insurance is protection against such risks as death, accidents, fire, crop failure, marine loss of goods in transit, ill-health etc.

P.A.S. Taylor

INTEGRATION (*Industrial economics)

When two or more firms unite in some form or other, the process is variously called 'absorption' 'amalgamation' 'fusion' 'merger' or 'take-over' and sometimes 'integration'.

P.A.S. Taylor

The carrying out, within the same establishment, of successive stages in the process of production.

F. Benham

Integration may be horizontal or vertical or diagonal.

Compiler

INTENSIVE AGRICULTURE (*Agricultural economics)

A method of production which uses high ratios of labour to land. This is found in England.

Miles Fleming

INTENSIVE CULTIVATION (*Agricultural economics)

As opposed to extensive cultivation, it refers to the cultivation of the same plot again and again.

Compiler

INTERACTION OF THE MULTIPLIER AND THE PRINCIPLE OF ACCELERATION (*Business cycles)

A famous theory of business cycles. Its early statement was given by Prof. R.F. Harrod in 1936 in his *The Trade Cycle.* The theory is also associated with the names of J.R. Hicks, Alvin H.Hansen, P.A. Samuelson and Kenneth Kurihara. Hicks in his *A Contribution to the Theory of Trade Cycle* gave an admirable exposition of this theory.

According to this theory under certain conditions the continuous interaction of the multiplier and acceleration tends to produce cyclical fluctuation.

The theory may be epitomised thus: An increase in investment results in a multiple increase in income *via* the multiplier. This increase in total income and expenditure causes a more than proportionate increase in the demand for capital goods *via* the relation (i.e.) acceleration. Thus is caused another and intensified surge of net investment which in turn *via* the multiplier increases the aggregate income and so on in a spiral of activity. This is the expansionary phase or prosperity.

But soon certain "dynamic determinants" such as propensity to save, shift to profits and changes in the amount of capital start limiting expansion and turning it into recession. Increasing proportion of savings go on reducing investment. The declining rate of increase of investment induces further fall in the rate of increase in consumption which *via* the accelerator causes an absolute fall in the net investment. The net fall in investment *via* the multiplier causes an absolute fall in income and consumption which will reduce rapidly net investment even to zero. This is the depression phase.

The forces which bring depression to an end lie partly in the necessity for replacements and partly in innovations and improvements. These forces start once again the process of expansion. So a new cycle starts rolling.

According to Hicks, antonomous investment (through multiplier) and induced investment (through accelerator) bring in cyclical business fluctuations.

Compiler

INTEREST (*Theory of value)

In strict sense, the payment which anyone receives during a given period in return for a loan.

OR

The payment made by a borrower for the use of a loan. It is commonly expressed as a certain percentage on the 'capital' sum of the loan.

Alfred Marshall

In the wider sense, the income or part of the income derived by a person or a corporation firm from the investment of his or its own resources.

D.H. Robertson

A premium for not hoarding money.

or

The reward for parting with liquidity for a specified period.

J.M Keynes

A payment made by the borrower of capital, by virtue of its productivity, as a reward for his (capitalist's) abstinence.

Knut Wicksell

A payment made or received for the use of a sum of money or its equivalent in goods, over a period of time.

Raymond Bye

The price paid for the hire of loan capital; more briefly it is the price of a loan.

A.K. Cairncross

The earning of capital.

J.K. Mehta

The return from the fund of capital.

E.R.A. Seligman

The income which goes to the owner of capital.

T.N. Carver

According to traditional economists it is the payment for "waiting", for "saving", for "abstinence" or for time preference.

Dudley Dillard

INTEREST AND DISCOUNT (*Monetary economics)

The charge made by a lender for advancing funds. When the charge is paid at maturity, it is interest; when it is deducted in advance, it is discount.

W.W. Haines

INTEREST FREE FINANCING (*Public finance)

Creation of new money by Government for financing public expenditure.

Dudley Dillard

INTEREST RATE (*Theory of value)

The charge for a loan stated as a percentage of the amount actually borrowed per year.

W.W. Haines

INTERIM DIVIDEND (*Industrial economics)

The distribution of profits made on account of those earned in a trading period, i.e. before the final dividend.

P.A.S. Taylor

INTERMEDIATE PRODUCTS (*Theory of value)

The products which are not outputs of the household sector but which do serve as inputs of firms.

Allen, Buchanan and Colberg

Producers' goods which are not original means of production but which come between the original means of production and consumers' goods.

F.A. Von Hayek

INTERMEDIATE TRENDS (*Business cycles)

Long waves. The intermediate trends of business activity are also called Kondratieff cycles after the Russian economist of that name.

Raymond Bye

INTERNAL DEBT (*Public finance)

The Government borrowings made within the country.

Compiler

INTERNAL DISECONOMIES (*Theory of value)

Disadvantages of large-scale production such as difficulties of management, high cost of production, difficulty of obtaining finance and the services of able managers etc.

Compiler

INTERNAL ECONOMIES (*Theory of value)

Advantages of large-scale production. They are classified into the following types:

(i) Technical economies:
   (a) economy of superior technique,
   (b) economy of increased dimension,
   (c) economy of specialisation,
   (d) economy of linked process.
(ii) Managerial economies,
(iii) Marketing or commercial economies,
(iv) Financial economies and
(v) Risk-bearing economies.

Compiler

Economies that result from the introduction of more complicated machinary, the better organisation of marketing and research activities,

the greater specialisation of labour and management etc., as the scale of a firm's operations increase.

G.M. Meier and R.E. Baldwin

Economies that are possible to a single firm.

OR

Economies dependent on or the resources of the individual houses of business engaged in it, on their organisation and the efficiency of their management.

We may divide the economies arising from an increase in the scale of production of any kind of goods into two classes—External and Internal Economies.

Alfred Marshall

INTERNAL ECONOMIES AND DISECONOMIES (*Theory of value)

Economies and diseconomies resulting from the internal organisation of the firm which enable the firm to produce more or less efficiently at some outputs than at others.

A.W. Stonier and D.C. Hague

INTERNAL GOOD (*Theory of value)

That which a person finds in himself given to him by nature or which he educates in himself by his own free action, such a muscular strength, health, and mental attainments.

Hermann

INTERNAL SPECIALISATION (*Theory of value)

The specialisation of processes (as opposed to external specialisation—the specialisation of products).

K.E. Boulding

INTERNAL TRADE (*International economics)

Called interregional trade by Bertil Ohlin, internal trade or home trade or domestic trade (as contrasted with foreign or international or world trade) is trade within the geographic boundaries of a country.

Compiler

INTERNATIONAL BALANCE SHEET (*International economics)

International balance of payments or simply balance of payments.

Compiler

INTERNATIONAL BANK OF RECONSTRUCTION AND DEVELOPMENT (IBRD) (*International economics)

The I.B.R.D. popularly called the World Bank, was born simulteneously along with the International Monetary Fund (IMF) as a result of the deliberations of the United Nations Monetary and Financial

Conference or popularly called Bretton Woods Conference which attended by representatives of 44 countries (including India) was held for three weeks from July 1 to July 22, 1944 at Bretton Woods, New Hampshire, U.S.A.

The Bank and the Fund both acquired legal status on December 27, 1945. Six months later the Bank was inaugurated on June 25, 1946. (The Fund commenced its operations in March 1947) The initial purpose of the Bank was to assist in the reconstruction of war-devastated economies. However, the long-term aim of the Bank is to help the economic development of all member countries.

"The Bank's main aims may now be said be:

1. The encouragement of capital formation in the less developed territories by guaranteeing and participating in private investments; in the absence of the latter the Bank provides resources, either from its own capital or with borrowed funds (Article 1, ii);
2. the promotion of international trade expansion and balance of payments equilibrium (Article 1, iii);
3. the provison of technical assistance to the less developed countries which in most cases have no experts available in the field of investment projects."

According to the provisions, only the members of the IMF can be the members of the IBRD. The U.S.S.R. did not become a member.

In the 1982 there were 146 members. Only an American can be President (chief) of the Bank. The first President was E. Meyer. He was elected on June 4, 1946. The present President of the I.B.R.D. is Mr. A.W. Clausen who assumed the office on July 1, 1981.

The Bank has two offshoots or affiliates—The International Finance Corporation (IFC) founded in July 1956 (starting with 31 member countries and an authorised capitl of $ 100 million, the IFC had in 1981 119 members and an authorised capital $ 650 million) and the International Development Association (IDA), established in 1960.

The initial authorised capital of the Bank was 10 billion dollars. The total loans of the I.B.R.D. amounted to $ 61.1 billion (1 billion=thousand millions) till December, 1981.

Compiler

INTERNATIONAL BANKS (*Monetary economics)

The banks which have most, if not all, of their branches overseas and whose principal business is centred in their overseas branches and particularly between their overseas branches and London. While their most profitable assets are their loan and advances to overseas customers, they hold their main reserves of cash and other liquid assets in London.

R.S. Sayers

INTERNATIONAL CENTRE FOR THE SETTLEMENT OF INVESTMENT DISPUTES (*International economics)

An autonomous institution set up by the IBRD.

Private capital more often than not fails to be attracted to underdeveloped countries as it fears dangers other than usual business (e.g. nationalisation and restriction on transfer facilities). In order to overcome this difficulty and to encourage a freer flow of private capital to the developing nations, the World Bank drafted a convention on the Settlement of Investment Disputes between states and nationals of other countries. The convention was sent in March 1965 to the IBRD members for approval and ratification. By the end of 1965, the Agreement was signed by 22 members.

The president of the IBRD is the chairman of the centre.

Compiler

INTERNATIONAL COFFEE AGREEMENT (*International economics)

One of the four Commodity Aggreements, the other three being the International Wheat Agreement, the International Sugar Agreement and tee International Tin Agreement.

All these aim at stabilization of commodity prices and safeguarding consumer interests.

The International Coffee Agreement was established in January 1958 with 15 countries of Central and South America besides France and Portugal.

Compiler

INTERNATIONAL DEVELOPMENT ASSOCIATION (IDA) (*International economics)

The IDA is one of the two affiliates of the World Bank, the other being the IFC. Brought into existence, (thanks to the proposal made by E.S.M. Mouroney an U.S. Senator, in March, 1958) by the IBRD, it commenced its activities on November, 8, 1960.

The Association nick-named "the soft loan window" grants to the underdeveloped countries loans at more flexible conditions than those of the IBRD. Loans are interest free (except for service charges) and are repayable partly in local currencies over a period of 50 years with 10 year of grace in easy instalments. Hence its loans are termed as softloans.

It derives its resources from the annual subscriptions of the IBRD member.

The president of the IBRD is the chairman of the Association unless he comes from the IDA country.

Compiler

INTERNATIONAL DIVISION OF LABOUR (*I ational economics)

International specialisation. Each country duce those goods for the production of which it is specially suited o. of its claimate,

of the qualities of its soil, of its other natural resources, of the innate and acquired capacities of its people.

Gottfried Von Haberler

INTERNATIONAL ECONOMICS (*Economics)

A branch of Economics which concerns itself with the economic relations between nations.

P.T. Ellsworth

A branch of economics that studies international financial institutions and issues and issues connected with international trade.

Compiler

INTERNATIONAL FINANCE CORPORATION (IFC) (*International economics)

One of the two affilliates of the World Bank, the other being I.D.A. (International Development Association). Being headquartered at Washingtion D.C., the Corporation commenced its operations from July 20, 1956 with an authorised capital of $ 100 million.

Its purpose is to promote economic development in member countries by means of investments made directly to private firms.

The Corporation does not lend either to the Governments or to the Government concerns. For the most part, it provides risk capital. It aims at supplementing the I.B.R.D's assistance by encouraging, jointly with private investors, the establishment, improvement and expansion of private enterprise of a productive character in the member countries and more especially in the developing countries.

Only the IBRD countries can join the IFC.

The World Bank cannot make loans directly to private undertakings nor can it take much risk. To overcome these limitations, the U.N.O. instructed the I.B.R.D. to prepare draf articles, for new Corporation. After the draft was approved by 31 countries, the Agreement in respect of the Corporation came into force. In 1981 the IFC had 119 members and an authorised capital of $ 650 million.

The idea of setting up this Corporation dates back to 1951. It formed a part of President Truman's 'Point-Four' programme.

Compiler

INTERNATIONAL FORCES (*Economics of development)

It refers to the role of the poor countries in the world economy.

G.M. Meier and R.E. Baldwin

INTERNATIONAL GOLD STANDARD (*Monetary economics)

Gold standard is classified into (i) domestic gold standard, and (ii) international gold standard, on the basis of the two functions of gold viz., control of the volume of currency and the stabilization of the rate of exchange.

Compiler

There are two distinct functions of the gold standard: The first aiming at control of the volume of note-issue, is obviously concerned with the internal value of the currency; we may, therefore, call it the domestic gold standard. The second aiming at the stability of the external value of currency, we may call it the international gold standard. The essence of international gold standard is the covertibility of the currency into gold —that is the fixed proportion of value between a unit of gold and a unit of the currency. The international gold standard is incomparably more important than the domestic gold standard.

Geoffrey Crowther

INTERNATIONAL GOODS (*International economics)

All commodities which are regularly exported or imported even if in small quantities.

Gottfried Von Haberler

INTERNATIONAL LABOUR ORGANISATION (ILO) (*Economics of labour)

Founded in 1919 on the recommendation of the Commission on International Labour Legislation, the I.L.O. was affiliated to the UNO as a specialised Agency in May 1946.

Under the Philadelphia Declaration, the ILO is charged with the obligation to promote "the extension of social security measures to provide a basic income to all in need of protection and comprehensive medical care."

The objectives of the I.L.O. are: the promotion of international cooperation and the achievement of international peace.

The activities of the Organisation consist chiefly in the collection, study and publication of statistical and other material concerning labour questions; the drafting of international social legislation and provision of technical assistance.

It is headquartered at Geneva. Whereas the League of Nations could not withstand the onslaught of the World War II, the ILO has survived due to its tripartite feature—the domestic arrangement of having employers, workers and the representatives of the Governments.

The present (1983) ILO Director-General is Mr. Francois Blanchard.

Compiler

INTERNATIONAL LIQUIDITY (*International economics)

It refers to current financial assets which are widely acceptable for the settlement of international indebtedness.

P.A.S. Taylor

Briefly stated it refers to the sum total of all reserve assets within the reach of nations for settling their foreign obligations.

Monetary gold, foreign currency holdings, and readily accessible exchange facilities with national and international credit institutions constitute the bulk of world reserve assets since they meet liquidity requirements best.

A. Amuzegar

By international liquidity is meant the stock of internationally acceptable means of payment.

J. Sanmarti J.S.

The terms refers to the world stocks of gold and convertible currencies and facilittes for borrowing such currencies.

Compiler

INTERNATIONAL MONETARY FUND (I.M.F.) (*International economics)

A specialised Agency of the U.N.O. Though, like I.B.R.D., affiliated to the U.N.O, it is an autonomous body. It was born with its twin sister IBRD as a result of the plan agreed upon by the experts from 44 nations at the conference held in the summer (July) of 1944 at Bretton Woods, New Hampshire, U.S.A. The Fund acquired legal status on December 27, 1945 and started its activities from March, 1, 1947.

It consists of all countries as members save the communist orbit. India is a founder-member. Its initial authorised capital was $ 10 billion. It has at present (1983) 146 members. It is headquartered at Washington D.C. The chief of the Fund is the Managing Director who must be necessarily an European. Mr. C. Gutt of Belgium was the first Managing Director appointed on May 6, 1946. The present (1983) Managing Director is Mr. Jacques de Larosiere. The Fund which "hopes to secure the advantages of gold standard without its disadvantages" aims at: "promoting international monetary cooperation, facilitating consultation and collaboration on international monetary problems, expansion and balanced growth of international trade, promoting and maintaining high levels of employment and real income, developing the productive resources of all members; promoting exchange stability, maintaining orderly exchange depreciation, asisting in the establishment of a multilateral system of payments in respect of current transactions between members; eliminating foreign exchange restrictions; making the Fund's resources available to the member to correct the maladjustments in their balance of payments without resorting to destructive measures; and shortening the duration and lessening the degree of disequilibrium in the international balance of payments of members." (L.V. Chandler)

The Fund's resources are found to be quite inadequate. Thus the problem of international liquidity has necessiated the reform of the IMF. Accordingly various plans and proposals have been put forward by several financial experts to solve the problem of international liquidity i.e. to

increase the Fund's resources. Some of the famous plans are The Triffin plan, the Bernstein plan, the Maxwell Stamp plan, Maudling's proposal, the Bernstein-Jacobson plan and the Roosa plan. Triffin in his *Gold and the Dollar Crisis* (1960) desired a return to the Keynes's plan *bancor* by conversion of the IMF into an International Central Bank. In 1968 S.D.R's (Special Drawings Rights) were devised as a measure of tackling the problem of international liquidity. However, the process of reforming the IMF is continuing.

India is a founder-member of the I.M.F.

Compiler

The International Monetary Fund was established in 1945 with a view to broadly providing a source of expanding internationally liquid purchasing power to different countries to enable them to achieve equilibrium in their current balance of payments in the context of larger and growing employment and production in world economy.

The role of the I.M.F. was to limit its loans largely in relation to the subscriptions governed by quotas of the different countries. These subscriptions were partly in terms of gold and partly in terms of the currencies of the member countries, and the growth of liquidity through the Fund is tied to the growth of the quotas. Gradually, the Fund augmented its resources through the General Agreement to borrow from members with surplus international exchange.

Every country has found that the IMF is a useful source of liquidity support, though the amounts each receives are small.

India has a unique status of having been connected with the Fund in its early stages.

P.R. Brahmananda

INTERNATIONAL PLANNING (*Economics of planning)

A state of affairs in which the resources of more than one country are the property of the countries as a whole.

B.C. Tandon

INTERNATIONAL SUGAR AGGREMENT (*International economics)

The Agreement that came into effect on January 1, 1954 with the main objective of ensuring equitable and stable sugar prices.

Compiler

INTERNATIONAL TRADE (*International economics)

World trade or foreign trade or global trade—trade among the nations,

Compiler

INTERNATIONAL TRADE ORGANISATION (I.T.O.) (*International economics)

A conceived (in 1947-48) but yet unborn international institution ! It is designed to expand multilateral and non-discriminatory global trade.

Compiler

INTERNATIONAL UNIT (*Economics of development)

A concept introduced by Colin Clark.

Compiler

The amount of goods and services which could be purchased for one dollar in the U.S.A. over the average of the decade 1925-34 or an amount interchangeable with them.

Colin Clark

INTERNATIONAL WHEAT AGREEMENT (*International economics)

The Agreement which aims at supplying wheat and wheat flour to importing countries at equitable and stable prices and to assure to exporting countries of markets for these products. The International Wheat Council which operates the Agreement, is located at London.

The first Agreement was concluded in 1933. Since then, there have been 1942 and 1949 new Agreements.

Compiler

INTERREGIONAL TRADE (*International economics)

The term coined by Nobel laureate Bertil Ohlin implies internal trade.

Compiler

INTERVENTION (*International economics)

Foreign exchange operations by the monetary authorities with the object of preventing or causing movements of exchange rates in accordance with the aims of the policy or tactics they pursue.

Paul Einzig

One of the two broad directmmethods of exchange control, the other being restriction. (Paul Einzing enumerates forty-one distinct methods of exchange control).

Intervention is a method in which the Government intervenes in the foreign exchange market either to hold the value of its currency up or to hold it down. In other words it may be practised either to peg up (i.e. overvalue) or peg down (under value) the currency.

Compiler

INTRA-INDUSTRIAL RENT (*Theory of value)

The rent that arises because of differences in the opportunity prices of land.

A.L. Meyers

INTRA-MARGINAL SELLER (*Theory of value)

Other than marginal sellers. The marginal sellers are those who are just induced to sell at the market price and who would refuse to sell at any lower price.

The sellers whose reservation prices are lower and who could be willing to sell for lesser price are sometimes called the intra-marginal sellers.

Compiler

INTRA-MARGINAL UNIT (*Theory of value)

A unit which would remain in the industry for a smaller payment than it actually receives.

Joan Robinson

INTRINSIC VALUE (*Monetary theory)

Intrinsic value or real value in contrast to face value refers to internal or material value of the currency unit. If the face value is higher (and it is) than the intrinsic value, then the currency is called token money in contrast to full-bodied money.

Compiler

INVENTION (*Economics of development)

The discovery of scientific novelties.

J.A. Estey

INVENTORY (*Economics of development)

A stock, a fund which is a flow over time—so much per week or per month.

F. Benham

Inventories are the stocks of merchandise held by a businessman for sale or for use in the productive process.

W.W. Haines

INVENTORY VALUATION ADJUSTMENT (*Theory of value)

A technical device to remove artificial changes in corporate profits introduced by price movements. Its effect is to reduce profits when they are inflated by rising prices of inventories and to raise profits unduly depressed by falling values of inventories.

W.W. Haines

INVESTIGATION OF ECONOMIC STRUCTURE (*Research methodology)

It is the first phase of operation in research, the second and the third being diagnosis and prognosis.

It refers to the continual compilation of facts about the size and nature of the economic system.

R. Ferber and P.J. Verdoorn

INVESTMENT (*Economics of development/Monetary economics/ Industrial economics)

The value of net additions including stcoks of goods in the hands of traders, to the physical assets of the country.

It is equal to total output minus output of consumer goods.

OR

From the standpoint of the community, it may be defined as the adding to the physical assets of the community; improving its land by irrigation etc; constructing or improving roads and railways, ports and harbours and airport, putting up more buildings, addition to its plant and machinery; increasing its stocks of goods.

F. Benham

With reference to banks, investments are securities. They are marketable on the stock exchange at various prices.

In Keynesian sense, the term refers to addition to the existing real capital assets such as the construction of new factories, new office buildings, transportation facilities and addition to inventories etc. It includes additions to inventories as well as to fixed capital.

Dudley Dillard

Actual expenditure on new investment goods during the day.

D.H. Robertson

The spending on additions on our real capital. Buying goods that are not currently consumed.

Abba P. Lerner

Investment (domestic) means an increase in the physical assets (real capital) of business.

W.W. Haines

In popular usage, the purchase of an asset, old or new, by an individual or a corporation.

Occasionally it might mean the purchase of an asset on the Stock Exchange.

Investment=the aggregate of real capital and the loan capital.

J.M. Keynes

The dictionary meaning is: the use of money—the spending of it—in the sense of acquiring something which will yield an income in the way of interest or profit.

We may define it as a particular way of applying savings—expenditures that lead to the making of 'real' capital, physical capital, the concrete instruments of production.

F.W. Taussig

From the point of view of the society, it is the process of producing wealth that will yield income in the future.

Raymond Bye

In the discussion of national income, that part of current output which takes the form of additions to or replacements of real productive assets.

C.L. Schultze

The term, in financial terminology, refers to holdings of securities whereas in economic terminology, it refers to costs incurred for the purpose of adding to real capital (machines, buildings, inventories etc).

Havens, Henderson and Crammer

Investment is classified into induced *VS* autonomous investment; domestic *VS.* foreign inducement; realized *VS* planned investment etc.

Investment is a topic that is discussed threadbare by the Classicists, the neo-Classicists, Marx, Keynes and the modernists.

Compiler

INVESTMENT BANK (*Monetary economics)

An organisation that assists business corporations and governmental bodies to raise money through the sale of stocks and bonds for usually long-term purposes.

Raymond P. Kent

INVESTMENT CURVE (*Keynesian economics)

The curve indicating the relationships between the rate of interest and the volume of investment. Lower the rate of interest, the more investment.

The curve is often called the schedule of the marginal efficiency of investment. J.M. Keynes who first defined it clearly called it the schedule of the marginal efficiency of capital.

Abba P. Lerner

INVESTMENT DEMAND OUTPUT (*Keynesian economics)

A schedule or curve showing the values of output demanded for investment, or the values of expenditures for output for those purposes,

at the various possible rates of interest. This may also be called an investment demand function showing investment demand as a function of interest rate.

L.V. Chandler

INVESTMENT DEMAND SCHEDULE (*Keynesian economics)

Marginal efficiency of capital.

Compiler

INVESTMENT GOODS (*Theory of value)

The goods whose final yield of satisfactions comes in the more or less distant future.

Raymond Bye

Investment goods or producer goods or capital goods as they are termed, are the goods that are used by the producer in the process of production.

Compiler

INVESTMENT MULTIPLIER (*Keynesian economics)

The concept of investment multiplier—a revolutionary contribution of J.M. Keynes—was first introduced in 1929. This is not to suggest that the earlier economists were unware of it. For instance a peep into the writings of Tugan—Baranowsky and K. Wicksell will give an inkling of the multiplier.

The multiplier (K) works in both forward and backward (reverse) directions.

The term 'investment multiplier' refers to the ratio between an increase in income and an increase in investment.

$$K = \frac{\Delta Y}{\Delta I}$$

where

K= investment multiplier,

Y= aggregate income,

I = aggregate investment,

Δ= increment or decrement

Multiplier is equal to the reciprocal of the one minus the marginal propensity to consume.

Marginal propensity to consume is written symbolically as

$$MPS = 1 - \frac{\Delta C}{\Delta Y} \text{ where}$$

C stands for aggregate consumption.

Thus investment multiplier is:

$$K = \frac{1}{1 - \frac{\Delta C}{\angle Y}}$$

Multiplier is the reciprocal of the marginal propensity to save.

Compiler

The commonsense meaning is that the times of depression when private investment lags, government investment in public works will increase the national income not only by the amount of public outlay but by some multiple of it.

Dudley Dillard

Let us call K the investment multiplier. It tells us that when there is an increment of agreegate investment, income will increase by an amount which is K times the increment of investment. It is different from Kahn's multiplier which we may call the employment multiplier.

Lord Keynes

INVESTMENT TRUST (*Industrial economics)

A company which utilises its resources to purchase different kinds of securities with the object of distributing the income therefrom to its shareholders.

Compiler

INVISIBLE HAND (*Industrial economics)

Every individual endeavours to employ his capital so that its product may be of greatest value. He generally neither intends to promote the public interest, nor knows how much he is promoting it. He intends only his own security, only his own gain. And he is in this led by an invisible hand to promote an end which was no part of his intention. By pursuing his own interest he frequently promotes that of society more effectually than when he really intends to promote it.

Adam Smith

Smith proclaimed the principle of the "Invisible Hand"; every individual, in pursuing only his selfish good, was led, as if by an invisible hand, to achieve the best good for all, so that any interference with free competition by Government was almost certain to be injurious.

Paul A. Samuelson

Intending only their own good, men are led by "an invisible hand" to further social ends. The underlying thesis is that the interest of the community is simply the sum of the interests of the members who compose it: each man, if left alone, will seek to maximize his own wealth; therefore,

all men, if unimpeded, will maximize aggregate wealth. The "invisible hand" is nothing more than the automatic equilibrating mechanism of the competitive market.

Mark Blaug

INVISIBLES (*International economics)

Invisible exports and imports as opposed to visible exports and imports. They include intangible items that are exported and imported, such as services rendered or received, current payments and receipts by the Governments, all forms of investment abroad and gifts and similar transactions not included under current payments and receipts by governments.

Compiler

Services bought or sold abroad, and other current payments not appearing in customs returns.

Paul Einzig

INVOLUNTARY INVESTMENT (*Keynesian economics)

Investment that results not from a deliberate decision to purchase machinery but from the piling up of productive stocks of finished goods.

A.W. Stonier and D.C. Hague

INVOLUNTARY UNEMPLOYMENT (*Economics of labour)

We do not mean by it the mere existence of an unexhausted capacity to work.

Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods relatively to the money-wage, both the aggregate supply of labour willing to work for the current money wage and aggregate demand for it at that wage would be greater than the existing volume of employment.

Lord Keynes

Involuntary general unemployment is a type of unemployment where men form all (or almost all) industries in the country, are willing to work for the existing wage, or even for less, but they simply cannot find jobs.

A.W. Stonier and D.C. Hague

IRON LAW OF WAGES (*Theory of value)

One of the wage theories, which states that in the long-run wages always equal to the cost of subsistence. In other words, wages over the long-run are determined at a bare subsistence level—that amount which is just sufficient to maintain the worker and his family.

According to the late Maurice Dobb, the term iron law of wages actually originated with the German Socialist Ferdinand Lasalle.

Karl Marx repudiated both the term and the idea.

Henry Thornton, the critic of this theory, is usually credited with its downfall, at least in its older version.

Compiler

IRREDEEMABLE DEBT (*Public finance)

Also known as perspective debt, it refers to a debt which may not be redeemed at all but the Government promises to pay the interest regularly.

Compiler

IRRIGATION (*Agricultural economics)

Supply of water to land under cultivation by man's effort through canals, wells etc.

Compiler

ISOCOST CURVE (*Theory of value)

The curve which shows the various possible combinations of resources that can be purchased with a given quantity of money, on the assumption that the prices of factors are in some fixed proportion.

M.L. Seth

ISO-ELASTIC CURVES (*Theory of value)

Two curves which have the same elasticity as each other at a certain price are said to be iso-elastic at that price.

Mrs. Joan Robinson

ISO-PRODUCT CURVE (*Theory of value)

Also described as equal product curve or isoquant, an iso-product curve is a curve that shows all those combinations of the two factors of production which, in given technical conditions, will produce the same units of output. It shows the smallest combinations of the two factors needed in the existing state of technology, to produce any given output.

A.W. Stonier and D.C. Hague

ISOQUANTS (*Theory of value)

A curve which shows the various possible combinations of productive factors yielding a given quantity of output.

M.L. Seth

The word "isoquants" simply means equal quantities; another expression is "isoproduce curves". Still another name given is "Production indifference curves". The slope of an isoquant at a point is the marginal rate of technical substitution (MRTS) at that point.

D. Watson

ISSUE (*Industrial economics)

A block of securities sold by a company.

Compiler

JACOBSSON PER (*History of economic thought)

The illustrious (second) Managing Director of the International Monetary Fund (the first was Belgian ex-minister of finance Mr. Camille Gutt) and an eminent economist.

(The late) Per Jacobsson of Sweden completed his studies as an economist and joined the staff of the League of Nations in 1920 to help prepare for the Brussels Financial Conference. He stayed with the Economic and Financial Section of the League through the 1920s.

At the beginning of the 1930s Jacobsson moved to the Bank for International Settlements (BIS) in Basle where he became economic adviser and head of the monetary and economic department. He spent a quarter of century with the BIS. Then he moved to the IMF and served as Managing Director and Chairman of the Executive Board from 1956 to his death in 1963.

In his memory, the Per Jacobsson Fund was established in 1964, which is an independent forum in the field of international monetary affairs. The IMF Managing Director and the BIS General Manager are its ex-officio members.

Per Jacobsson is the author of the famous "Jacobsson Plan" which is an attempt to reform the IMF.

Compiler

JAIN, L.C. (*History of economic thought)

A leading monetary economist of India. One of his works include *Monetary Problems of India* and *Indigenous Banking in India.* He was the 23rd President of the Indian Economic Association in 1940.

Compiler

JAIN, PRAKASH CHANDRA (*History of economic thought)

An eminent Indian economist Allahabad University.

After his M.A. in Economics in the thirties from the University of Allahabad, Jain did his M.Sc. (Econ.) at the London School of Economics. On his return from London, he joined Allahabad University as Professor of Economics.

Prof. Jain is the author of *Industrial Problems of India, The Text Book of Economics*, the famous *Indian Economics* and *India Builds Her War Economy*. He edited in 1976 *Essays in Contemporary Economics* in honour of the late professer J.K. Mehta.

Compiler

JAW BONE CONTROL (*Monetary economics)

A name applied by Paul A. Samuelson to moral suasion—a method of credit control.

Compiler

JET PROPELLED INFLATION (*Monetary economics)

A name employed by F. Benham to refer to hyper inflation.

Compiler

JEVONS, WILLIAM STANLEY (1835-82) (*History of economic thought)

An outstanding British economist. Jevons—a mathematician, a pure theorist, a Benthamite, a logician, and a political thinker—was one of the economists who started the movement of neo-classicism. The other two were, Carl Menger (1840-1921) of Austria and Leon Walras (1834-1910) of France.

Jevons advocated free trade. He said, "To me it seems that our science must be mathematical simply because it deals with quantities." According to Eric Roll, it was Jevons who made the scattered fragments of earlier utility analysis into a comprehensive theory of value, exchange and distribution." He formulated the famous Law of Diminishing Marginal Utility. He wrote, "Value depends entirely on utility." He defined "utility as the quality possessed by an object of producing pleasure or preventing pain." He denied the possibility of interpersonal comparison of utility.

With the aid of the law of diminishing marginal utility, Jevons formulated the equation of exchange—the ratio of increments of commodities consumed must, in equilibrium, be equal to ratios of the intensities of last wants satisfied. The equation is nothing but the condition of equilibrium.

According to Mark Blaug, the theory of labour supply is Jevon's most important contribution to the mainstream of neo-classical economics. Jevons argued that labour world be supplied as long as the individual thought that the utility of labour (pecuniary award) exceeded disutility of labour (irksomeness of labour). His another contribution is the theory of capital.

Jevons made significant contribution to the theory of trade cycles. In the words of Lord Keynes, Jevon's theory states: "trade cycles are primarily due to fluctuations in the bounty of harvest."

Since then it has come to be called sunspot or harvest theory of business cycles.

Jevon's important books include:

1. *The Theory of Political Economy* (1871).
   (This is his main work produced at the age of 36.)
2. *State of Relation to Labour* (1882).
3. *The Investigations in Currency and Finance* (1884).

His other works, besides a large number of important articles, are: *A Serious Fall in the Value of Gold* (1863), *The Coal Question* (1865), *Money and Mechanism of Exchange* (1875), *Primer of Political Economy* (1881), and *The Principles of Economics* (1905).

Dr. Alfred Marshall wrote: "I have learnt from no other economist as much as I have from Jevons."

He completely concurred with Ricardo's rent theory. By applying differential calculus to economic notions, Jevons paved the ground for the growth of mathematical economics. He distinguished between actual utility, prospective utility and potential utility.

Jevons is considered as the father of index numbers.

Jevons, a son of iron merchant was brought up in Liverpool. In 1851, he entered the university college, London, studying chemistry mathematics, Greek and Latin. He passed M.A. in logic, philosophy and political economy in June 1862.

He died at the age of 46, in August 1882 by drowning.

Mark Blaug writes, "If he had not died prematurely in 1882 at the age of 46, he would have joined Wicksteed and Marshall in England, John Bates Clark in America, Wicksell in Sweden and Walras in Lausanne, in formulating the general marginal productivity theory of distribution."

Compiler

JHA, LAKSHMI KANT (B.1912) (*History of economic thought)

A noted Indian economist, Chairman, Economic Administration Reforms Commission (which was set up in March, 1981 as Government's think-tank for economic policy initiatives), member Brandt Commission and the former Governor of the Reserve Bank of India.

Compiler

JOB EVALUATION (*Economics of labour)

"Job rating." A way of pricing the jobs within a plant by a systematic scheme.

Richard A. Lester

JOB VALUATION (*Economics of labour)

A logical and to some extent, objective method of ranking jobs relatively to each other.

B.B. Lal

JOBBER (*Agricultural economics)

A middle man whose sole activity is to sell to retailers. He buys in wholesale amounts and breaks his purchases down into smaller units according to the needs of his customers.

G.W. Forster and M.C. Leager

JOINT COSTS (*Theory of value)

Costs involved in the simultaneous production of two or more goods.

Compiler

JOINT DEMAND (*Theory of value)

Where two or more goods are closely complementary, the demand is said to be joint.

Raymond Bye

Demand for two or more factors necessary for final product.

Briggs and Jordan

Things are said to be in joint demand when what is wanted to satisfy certain kinds of demand is not a single article but a combination of articles.

Jathar and Beri

JOINT PRODUCTS (*Theory of value)

In some cases it is impossible to produce one item without producing another. Cotton lint cannot be produced without also producing cotton seed. Beef cannot be produced without also producing cattle hides. These are called joint products.

Albert L. Meyers

Two or more goods produced by a single process in such a manner that it is impossible to produce one good without turning out the other.

M.L. Seth

JOINT-STOCK BANK (*Monetary economics)

In England commercial banks are called joint stock banks.

R.S. Sayers

JOINT-STOCK COMPANY (*Industrial economics)

It is called Business Corporation in America.

A body corporate with a common seal, carrying on business under the management of a board of directors and owned by a group of shareholders.

A.K. Cairncross

Joint-stock company was first developed in Tudor times when England's foreign trade began to expand.

J. Harvey

An association of a number of individuals formed for a common purpose and registered according to company law.

Sen and Mitra

Joint-stock enterprise or company is an association of shareholders each with a liability for the debts of the company limited to the nominal amount of his investment.

Briggs and Jordan

JOINT SUPPLY (*Theory of value)

Commodities are in joint supply whenever one commodity is a by-product of another so that it is impossible to increase the supply of one without simultaneously increasing the supply of another.

A.K. Cairncross

That relation where two or more products are obtainable at the same time in a single production process.

Raymond Bye

Supply is said to be joint when the supply of one thing involves the supply of another. For example sheep provide wool, meat and hide. A commodity is said to have joint supply when commodities are jointly produced out of it.

Compiler

JONES, RICHARD (*History of economic thought)

An isolated representative of the historical method in England in the "thirties."

M. Bowley

JOPLIN, THOMAS (*History of economic thought)

The inventor of the currency doctrine as opposed to the doctrine of banking with reference to the methods of note issue.

Compiler

JOSEPH, S.C. (*History of economic thought)

A distinguished Indian economist. Formerly professor and head of the department of economics at Madras University he was appointed in October, 1979 the visiting professor in the department of Applied Economics, Cochin University.

Compiler

JOSHI, G.V. (*History of economic thought)

An Indian nationalist economist. He wrote on a wide variety of aspects of Indian economy, notably public finance, agriculture and industry. He advocated large-scale developmental programme and emphasized the role of the state. His famous book is *Speeches and Writings* (1912). He advocated a *Council of Economic Advice.*

Compiler

JOURNAL (*Commerce)

A bank book through which transfer entries on rectification of errors are made.

A.K. Basu

JUGLAR, CLEMENT (1819-1905) (*History of economic thought)

The famous French economist and author of juglar cycles.

Juglar abondoned medicine for economics in 1848. He was a genius. He must be ranked as to talent and command of scientific method, among the greatest economists of all times. He was the first to use time-series material (mainly prices, interest rates and central bank balances) systematically. Since this is the fundamental method of modern business-cycle analysis, he can be justly called its ancestor. He wrote the famous sentence: "The only cause of depression is prosperity".

His *Des Crises Commerciales et de leur retour periodique en France, en Angleterre et aux Etats Unis* (1862) contains his celebrated business cycle analysis.

Compiler

JUGLAR CYCLE (*Business cycles)

Major cycle composed of three minor cycles and of the duration of 10 years or so named after Clement Juglar.

Compiler

JUST PRICE (*General economics)

A famous doctrine of St. Thomas Aquinas (1225-74). According to it, the price should be equal to the value of the object.

Compiler

JUST WAGES (*Economics of labour)

Wages based on accepted standard.

W.J. Fellner

K (*Monetary theory)

Symbol K is employed by Alfred Marshall in his formulation of the Quantity theory of money to denote the fraction of the community's income which is kept in the form of currency or ready purchasing power.

Lord Keynes uses the symbol K to signify his investment multiplier.

Compiler

KAHN, ROBERT F. (*History of economic thought)

An outstanding British economist, and the originator of the concept of multiplier. He is no more.

Professor Kahn, a friend and colleague of Lord Keynes, invented the concept of multiplier—an inherent part of Keynesian economics—in his celebrated article "The Relation of Home Investment to Unemployment" in *Economic Journal*, June 1931, (p.173). Alvin H. Hansen of Harvard described Kahn's article as "one of the great landmarks of economic analysis".

Lord Keynes who extended Kahn's concept in his *General Theory* (1936) writes, "Kahn's multiplier is different from my investment multiplier. We may call it the employment multiplier designated by K' since it measures the ratio of the increment of total employment which is associated with a given increment of primary employment in investment industries. That is to say, if the increment of investment ΔI_w leads to increment of primary employment ΔN_2 in the investment industries the increment of total employment $\Delta N_1 = K' \Delta N_2$

A.H. Hansen in his *A Guide to Keynes* expresses the same as

$K' N_2 = N$ where,

N_2=primary employment (on public works)

N=Total employment and

K'=the multipliers.

Another important article of Kahn as quoted by J.A. Schumpeter is "Some Notes on Ideal output", *Economic Journal*, March 1935. According to Schumpeter, Professor Kahn was chief authority on welfare economics, and virtually a co-author of the *General Theory*, Kahn also contributed significantly to the theory of imperfect competition.

KALDOR, NICHOLAS (B.1908) (*History of economic thought)

World renowned versatile Cambridge (England) economist.

Kaldor, M.A., F.B.A., B.Sc. (Econ.) was born on 12th May 1908 in Budapest. He graduated from the London School of Economics in 1930.

The following is Kaldor's career:

1. Assistant Lecturer, Lecturer, Tutor and Reader, London School of Economics, 1932-47;
2. War service U.S. Strategic Bombing Survey Unit, Director Research and Planning Division, U.N. Economic Committee for Europe, 1947-49;
3. Lecturer, Reader and now Professor of Economics, Cambridge University, 1949.
4. Member, Royal Commission in the Taxation of Profits and Income, 1950-55;
5. Survey on India's Tax Reform, Government of India, 1956;
6. Taxation Adviser, Government of Ceylon, 1958;
7. Fiscal Adviser, Government of Mexico, 1960;
8. Economic Adviser, Government of Ghana, 1961;
9. Fiscal Adviser, Government of British Guiana, 1961; Government of Turkey, 1962; Reserve Bank of Australia, 1963; and
10. Special Adviser to Chancellor of Exchequer 1964.

Besides a large number of highly original articles and papers, Dr. Kaldor is the author of:

1. *An Expenditure Tax*, (1955).

2. *A Statistical Analysis of Advertising Expenditure*, (1946) (with S. Silverman),
3. *Eassays on Value and Distribution* (1960),
4. *Essays on Economic Stability and Growth* (1960),
5. *Capital Accumulation and Economic Growth* (1961)
6. *Essays on Economic Policy* (2 volumes) (1964); and
7. *Causes of the Slow Rate of Growth of the U.K.* (1966).

Professor Kaldor is among the most brilliant critics of E.H. Chamberlin's theory of monopolistic and imperfect competition. "The Concertina effect" is Kaldor's name. The name of "Cobweb theorem which was developed in 1930 by H. Schultze (U.S.A), Jan Tinbergen (the Netherlands) and U. Ricci (Italy) was Kaldor's suggestion.

Kaldor along with J.R. Hicks by introducing the compensation principle founded (among others) the modern welfare economics.

Professor Kaldor was invited by the Government of India to suggest reforms in the Indian tax structure. In his *Report on Indian Tax Reform* (1956), Kaldor suggested the introduction of annual wealth tax, capital gains tax, expenditure tax and the gift tax. India was the first country to impose the (now repealed) expenditure tax. His *Report* containing, revolutionary changes in India's tax system, created a lot of brilliant controversy. Kaldor is, in totality, a great critic of main stream of economics.

Kaldor, a member of the new Cambridge School as distinct from the old one of Marshall and disciples, criticised the neo-classical theory of growth as unrealistic because of the vision of a consumer dominated society on which it is based. In 1957, he presented for the first time an alternative simple growth model. The crucial assumption underlying Kaldor's model is that competition is not perfect and factors are *not* remunerated at their marginal productivity value. "Kaldor postulates that growth rate of output *per capita* increases smoothly with the growth rate of capital *per capita*, though at a diminishing rate, and calls this relationship a 'technical progress function'. In 1961 Kaldor in collaboration with J.A. Mirrlees presented a more sophisticated version of this model.

His "Recent Controversy on the Theory of Capital" published in 1937 in *Econometrica*, contains a complete bibliography of the Knight-Hayek controversy over capital theory.

Alluding to Kaldor's, vigorous attack upon Bohm-Bawerk's theory of interest, the late Schumpeter criticised Kaldor by arguing that "It is... regrettable to find that a theorist of Mr. Kaldor's rank should have expressed the exactly opposite view of Bohm-Bawerk's theory of capital in sentences that clearly violate both the latter and the spirit of Bohm-Bawerk's analysis .... I beg to remind Mr. Kaldor of the fact that Bohm-Bawerk was the author of a theory of interest that is most appropriately called a premium (Agio) theory".

Kaldor's welfare criterion states: "A change is an improvement if those who gain evaluate their gains at a higher figure than the value which the losers set upon their loss". (W.J. Baumol).

Kaldor, a very brilliant economist, originated a non-Pigou, non-1936-Keynes version of full employment.

Compiler

KALE, VAMAN GOVIND (1876-1946) (*History of economic thought)

A great economist of India, He is considered to be the founder of "Indian economics".

Kale was the Professor of Economics and History at Ferguson College, Poona. He also served as a member of State (1921-23) and a member of the Indian Tariff Board (1923-25). He was the 12th President of the Indian Economic Association in 1929.

His leading publications are:

1. *India and Imperial Preference* (1910),
2. *Indian Industrial and Economic Problems* (1912),
3. *Gokhale and Economic Reforms* (1916),
4. *An Introduction to the Study of Indian Economics* (1917),
5. *The Dawn of Modern Finance* (1922),
6. *Economics of Protection in India* (1929),
7. *Problems of World Economy* (1931), and
8. *India's National Income* (1932).

Prof. Kale wrote that Indian economics might "lay claim to respectful considerations like English Political Economy, for instance, as it deals with peculiar political, social, intellectual and economic conditions which constitute an important subject of research and study."

While holding the traditional assumptions untenable, Kale emphasized the importance of inductive method.

He favoured protective tariffs. He regretted the under-development of economics in India. However, he hoped, "the assistance of economists will be sought in the future in an increasing measure in India to the benefit of the Government and the people of the country".

According to him "the salvation of India lay entirely in its industrial regeneration and development".

According to the late Prof. Brij Narain, Kale occupied the first place among the Indian economists.

Compiler

KALECKI, MICHAEL (B. 1879) (*History of economic thought)

A brilliant econometrician of Poland. Born on June 22, 1879 (he is now dead), Kalecki was educated in Poland and had practically no formal

training in economics. After studying engineering in Danzig, he gravitated to economic journalism, and then to research job at the Polish Research Institute on Business Cycles, which he began in 1929.

Kalecki went to England in 1936, first to Cambridge, then after a couple of years to Oxford. In 1946 he went to New York and in 1955 returned to Poland where he died at the ripe age of over 90 years. He was during his long career associated with the Department of Economics, Cambridge University (1937). Oxford University, Institute of States (1939-45), and the U.N. Economics Department (1947). He was Adviser to Chairman of Planning Committee, Warsaw, 1957-64. Just before his death, Kalecki was the professor of School of Planning and Statistics and a member of the Polish Academy of Sciences. Kalecki was invited by the Government of India as an economic adviser.

Kalecki wrote among others:

1. *Essays on the Theory of Business Cycles* (1933)
2. *Essays in the Theory of Economic Fluctuations.*
3. *Studies in Economic Dynamics* (1954).

In addition to these important books, Kaleki wrote over 200 penetrating articles and papers most of which are on economic fluctuations economic dynamics, growth and socialism.

Kalecki propounded the much discusseed "principle of increasing risk: the subjective risk to the firm of increased indebtedness rises with every increase in the amount of borrowed capital relative to equity capital.' He alongwith Kaldor and Joan Robinson suggested an alternative to marginal productivity and attempted to carry Keynesian analysis of economic development into the treatment of long-run factors. Kalecki's newer 'political' theory traces recession to periodic political clamping down on creeping inflation.

Kalecki whose influence on Cambridge economic thought is tremendous even anticipated Lord Keynes. In his 1933 *Essay*, he clearly introduced the concept of effective demand and the national income multiplier. "It is, of course, remarkable that a lone scholar such as Kalecki, largely self-taught and working without the stimulus of like-minded colleagues and a strong economic tradition should have arrived independently at conclusions which took Keyness, with all his advantages, a decade to reach."

Compiler

KAMERALISM (*History of economic thought)

German and Austrian conception of mercantilism.

In the Middle Ages, the word Kamera (German Kammer—Camera or chamber) designated the place where the Royal income was stored. The term soon came to apply to royal property.

Thus Kamera affairs concerned the economy of the prince and Kameralism was the art which maintained, increased and administered the royal income. Kameralism being based upon the assumption of the subordination of individual interests to those of the state, considerably contributed to the economic development of Germany.

The famous Kameralists are:

1. Ludwig Von Seckendorff (1626-92). Called Adam Smith of Kameralism, Seckendorff was the exponent of quasi-absolute state.
2. Johann Joachim Becher (1625-85). He was the greatest representative of Kameralism.
3. Philip Wilhelm Von Hornick (1938-1712),
4. Johaness Heinrich Gottlob Von Justi (1787-71) and
5. Joachim George Darjes (1714-91).

Compiler

KANTOROVICH, LEONID VITALOVICH (B. 1912) (*History of economic thought)

The Russian co-winner of the £ 69,000 strong 1975 Nobel prize in Economics. (The other co-winner is Dr. Tjalling C. Koopmans of Yale University (U.S.A.).

Born on January 15, 1912 at Leningrad and educated at Leningrad University, Professor Kantorovich belongs to Mathematic Institution of Soviet Science Academy.

Kantorovich and Koopmans were awarded the world's highest prize for their having, though independently, "renewed, generalised, and developed methods for the analysis of the classical problem of economics on the optimum allocation of scarce resources."

Dr. Kantorovich is the first Russian to win the prize. (The way there are Russian born Americans to bag the prize. They are Simon Kuznets and Wassily Leontief).

Kantorovich, a mathematician of first rank has made special contribution to linear and non-linear programming. Of course, he was the first to develop the method of linear programming in 1939.

Kantorovich worked as Instructor, Leningrad Institute of Industrial Construction Engineering, 1930-39; and Instructor, Leningrad Univerisity, 1932-34. In 1934 he became Professor. He became a member of the Soviet Academy of Science in 1964 and is the holder of three orders of Lenin. At present he is Deputy Director, Laboratory for Use of Statistical and Mathematical Methods in Economics, Siberian Department.

Kantorovich, it is significant, has been at present working with many Soviet economists on the construction of tools for a more rational management of the Soviet economy,

His famous work is *Ekonomicheski rachet nailuchsheqo ispol 'zovaniya resuorsoy* edited by V.S. Nemichinov (1959) translated as *The Best Use of Economic Resources* (1965).

Compiler

KARVE, DATTATRAYA GOPAL (1899-1968) (*History of economic thought)

A famous Indian economist and the 28th President of the Indian Economic Association in 1945. Professor Karve died of heart attack in the afternoon of December 28, 1968.

He was the leading architect of the co-operative movement in India. He served on a number of cooperative bodies of All-India level and represented India at various international cooperative commissions and conferences.

Karve, the author of over a dozen publications, was (1) the Vice-chairman of the State Bank of India (1960-62), (2) Deputy Governor, R.B.I. (1962-74), (3) Member, Fourth Finance Commission (1965), and (4) Professor of Economics, Ferguson College, Pune (from 1923 for about two decades). Later he became the Vice-Chancellor of Poona University. He was also the Director of Programme Evaluation of the Planning Commission (1952-53) and Chairman of Bombay State Co-operative Bank.

The late Jawaharlal Nehru invited Karve to head a Committee which is known as Karve Committee. The committee laid down the groundwork for the development of small-scale and village industries in the second and subsequent five year plans.

It was due to the efforts of Karve that cooperative training was given special emphasis in the Rural Credit Survey Report. He also headed Crop Loan Evaluation Committee. The Committee has sown the seeds of improved agricultural cooperative credit system in the country.

He also headed the Sub-Committee of Central Board of the Bank. It prepared the blueprint of the branch expansion programme of public sector banking in the five-year period ending June, 1965 for opening of 300 new branches.

Professor Karve was the first Vice-Chairman of the Agricultural Refinance Corporation (now defunct) which was launched during his tenure at the R B.I.

His first book on federal finance was published in 1929.

Compiler

KAUTILYA (4 B.C.) (*History of economic thought)

Kautilya or Chankaya or Vishnugupta, described as India's Machiavelli, is considered to be the founder of economic thought in India. His *Arthashastra* which is divided into 15 chapters running into about 430 pages is the earliest economic treatise in the country.

Arthashastra is a combination of political science, jurisprudence and economics.

Shukra defined 'Arthashastra' as "that science which describes the actions and administration of Kings in accordance with the dictates of revelation and of law as well as the means of appropriate livelihood".

Compiler

KENNEDY ROUND (*International economics)

Kennedy Round, named after the late president John F. Kennedy of the U.S.A., is an agreement concluded in Geneva. It began an May 4, 1964 and concluded on May 1967 "in a crescendo of bluff and brinkmanship between the U.S. and the European Common Market". It was a historic pact in the world trade of the 20th century.

It stands to the credit of President Kennedy to have been able to persuade the U.S. Congress in 1962 to empower him to cut tariffs by 50 per cent. The U.S. Congress accordingly enacted on October 11, 1962 the Trade Expansion Act (TEA) authorising the president to reduce tariffs over a period of five years on reciprocal basis. The 54—member world trade organisation which negotiated on the GATT worked painstakingly for four years since May 1963, but it could reach an accord on an average reduction of 30 per cent in tariff as against the original cut of 50 per cent envisaged by the TEA.

Under Kennedy Round, some 60,000 items ranging from "canned peaches to cars" or 80 per cent of the annual trade or $ 40,000 million worth industrial products were to be covered in the final package deal for tarriffs.

The actual beneficiaries of the Kennedy Round were, however, the affluent societies. Nevertheless, it helped to initiate a process of liberalisation between the developed and developing nations.

Compiler

The Kennedy Trade Act (1962) aimed at a new round of reciprocal tariff cuts. It was the sixth round of tariff reduction under the auspices of GATT, earlier efforts having taken place in 1947, 1949, 1951, 1956 and 1961. The agreement was made difficult by the wish of certain members of the Common Market, most notably France, to increase farm tariffs.

P.A. Samuelson

The establishment of the EEC obliged the U.S. to adopt something of a different attitutde. The TEA, 1962, abolished the peril point principle and authorised the president, for a period of five years, to reduce all import duties by a maximum of 50 per cent.

Thus the contracting parties were able to decide in May 1963 that a further tariff conference should be held in 1974 (the so-called Kennedy Round) would, *inter alia*;

(a) cover all kinds of products and trade barriers (not only custom duties); (b) comprise a uniform percentage reduction of all tariffs;

(c) ensure better access for agricultural products to world markets: and (d) stimulate exports by the less-developed countries without obliging these territories to grant reciprocity.

The Kennedy round began on 4 May, 1964. Only the countries which were prepared to make a general 50 per cent reduction (the EEC countries and the majority of EFTA countries, the U.S. and Japan) participated in the initial discussion. Some less-developed countries, including India, subsequently joined in the negotiations.

M.A.G. Van Meerhaeghe

KEY CURRENCY (*Monetary economics)

Key currency or reserve currency has the following four qualities:

(i) It is the currency of a great trading nation and one which may be earned easily by normal trade and whose balances carry the promise that they may be exchanged for goods both desirable in themselves and for the world demand which exists for them;
(ii) it is stable in value or it must lose value no faster than other currencies;
(iii) it must be supported in its home country by great and experienced banking institutions of skill and probity; and
(iv) it must be free from recurrent scarcity.

W.M. Scammel

KEY INDUSTRY (*Industrial economics)

An industry on which depends the development of many other industries. e.g. coal, iron, petroleum etc.

Compiler

KEYNES, JOHN MAYNARD (1883-1946) (*History of economic thought)

Shakespeare of economics. In other words, the greatest economist of all times. He belongs to England.

The Right Honourable John Maynard Keynes, C.B.; Baron Keynes of Tilton, Sussex in the peerage of the U.K. was born on June 5, 1883, the year when Karl Marx died.

His father John Neville Keynes, the greatest economic methodologist, was a distinguished economist and logician. His mother was the Mayor of Cambridge. Keynes who possessed charismatic personality and exceptional intellect (and later a lot of money) married at the age of 42 years, Lydia Lopokova, a renowned star of the Russian Imperial Ballet—the best thing Maynard ever did according to Mrs. (Mary) Alfred Marshall. In 1942 Keynes became Lord Keynes. In 1936 he had become the greatest economist of the world. He died of (second) heart attack at the age of 63, on April 2, 1946. At the time of his death, both of his parents survived him.

Lord Keynes as a prodigy of intellect, thinker, mathematician, econometrician, economist, political economist, adviser to Governments, patron of arts etc. was a very great Englishman.

Lord Keynes wrote ten books, five booklets, about three hundred original and provocative articles and about fifty reviews on official and non-official reports. His publications include:

1. *Indian Currency and Finance* (1913),
2. *The Economic Consequences of Peace* (1919),
3. *A Treaties on Probability* (1921),
4. *A Revision of the Treaty* (1922),
5. *A Tract on Monetary Reform* (1923);
5. *A Short View of Russia* (1925),
6. *The Economic Consequences of Mr. Churchill* (1925),
8. *The End of Laissez Faire* (1926),
9. *A Treaties on Money* (1930), (in two Volumes)
10. *Essays in Persuasion* (1931),
11. *Essays in Biography* (1933),
12. *Means to Prosperity* (1933),
13. *The General Theory of Employment, Interest and Money* (1936),
14. *How to Pay for War* (1940).

Of these, *The General Theory* is his Bible.

Keynes with his iconoclasm revolutionised economic thought and his economics came to be called new economics. Nobel laureate L. Klein picturised it as Keynesian revolution.

Keynes not only completely departed from classicism but also vehemently attacked it to the point of its virtual death (in Keynesian sense the term "classicist" refers to economists down from the followers of Ricardo to A.C. Pigou). He repudiated the automatic self-adjusting nature of economic system (i.e. Smithian Invisible Hand) and successfully advocated the active intervention of the state into economic matters. He dealt a death-blow to *laissez faire* capitalism. He denied Say's law of Markets both for short and long periods and demonstrated that a capitalist economy was characterised deficiency of aggregate effective demand, that is to say, over-production and under-consumption. He proved this by introducing the concept of consumption, function or propensity to consume. He decried long-run by quipping, "In the long run we are all dead" and showed the realism of short-run.

Keynes, a pupil of Marshall and Pigou, denounced the *possibility* of the existence of full employment and injected the realistic cancept of under-employment or less than full employment equilibrium. He launched a blistering attack on thriftiness and saving in that they curtailed aggregate effective demand and hence employment. He challenged the celebrated Pigouvian thesis that unemployment could be counteracted by wage cut and argued that the policy of the general money wage cut would on the

contrary precipitate the problem of unemployment by causing a decline in aggregate effective demand. Keynes advocated neither a wage cut nor a wage boost but argued for leaving money wages intact.

Keynes successfully integrated the general value theory and monetary theory. He helped us "think of Economics in dynamic rather than in static term." His *General Theory* is mainly a book on macro-economics whereas Marshall's *Principles* is chiefly micro-economics. It is Lord Keynes who ushered in the real era of macro-economics in 1936. Keynesian theory is a general and not a special theory in that it is applicable to all types of suituations—full employment, less than full employment and over full employment. He put forward the concept of liquidity preference and propounded what later on came to be called the liquidity preference theory of interest. *Inter alia* he rejected the classical theory of interest.

He favoured deficit budget to balanced budget. Keynes pointed out that the phenomenon of inflationary price rise would appear only in the post-full employment situation. Between inflation and deflation, he discovered the latter to be a greater villain. He introduced the notion of inflationary gap—"an excess of anticipated expenditure over available output at base prices" (Kenneth Kurihara). He suggested deficit financing to augment investment and employment.

According to Lord Robbins, the greatest achievement of Keynes was his success in relating academic economics to the economics of government. He gave us the idea of mixed economy. He developed the concepts of investment multiplier, the marginal efficiency of capital, secular stagnation, *etc.* He redefined the terms saving and investment. According to him aggregate investment always equals aggregate saving.

He regarded the trade cycles as being occasioned "by cyclical change in the marginal efficiency of capital". As observed by L A. Metzler, the pure theory of business cycles was never one of Keynes's primary interests; nevertheless whatever passing references he made to trade fluctuations have surprisingly turned to be more than a trade cycle theory.

He advocated the gold exchange standard in place of the gold currency standard. He expounded the income-expenditure theory of money which is a great advance on the classical version of the quantity theory of money. He recommended compulsory saving to fight wartime inflation. He started as a confirmed free trader, became a protectionist during the great depression and ended in his last days as an internationalist with the emphasis on the reduction of tariff barriers. He advocated cheap money policy and held open market operations to be more superior to bank rate policy. He also emphasised public works programme to combat depression and unemployment.

Lord Keynes was the key figure in the creation of the I.M.F. and the I.B.R.D. He was the first to propose the reformative idea of *Bancor.* He was mainly responsible for roosevelt's New Deal.

Keynes has been the most influential economist. His theories are

related to policies and his ideas are translated into action by the statesmen. Keynes is a unique personality. At once he is a highly controversial figure. The controversies which Keynes initiated in 1936 have not died even today.

Compiler

KEYNES, JOHN NEVILLE (1852-1949) (*History of economic thought)

A distinguished economist and logician of Cambridge (England).

Keynes's *The Scope and Method of Political Economy* (1890) is still one of the master-pieces on economic methodology. Along with Marshall's *Principles* (1890), this book widened the scope of political economy. Prof. Keynes, the proud father of J.M. Keynes besides being the Registrar of Cambridge University, taught economics there.

J.A. Schumpeter in his History writes: "We must record the excellent performance of J.N. Keynes (i.e. his aforesaid book) that settled most of the methodological issues in a spirit of judicious reasonableness and to the satisfaction of the profession".

Keynes was a close associate of Marshall.

Compiler

KEYNESIAN THEORY OF ECONOMIC DEVELOPMENT (*Economics of development)

As a matter of fact Lord Keynes did not develop any systematic growth model unlike Harrod, Domar, Kaldor etc. However, his scattered statements and formula have been blended by his disciples to form a more than a development model.

Keynes developed secular stagnation (capitalist breakdown) thesis based on general over-production, chronic-under-consumption and the falling marginal efficiency of capital.

According to Keynes, total income is a function of total employment in a country. The volume of general employment depends on aggregate effective demand. Effective demand that determines the equilibrium level of employment and income, is determined by aggregate demand price and supply price. Effective demand is broken into consumption demand and investment demand. Consumption depends upon consumption function. There is a lag between consumption and income. The gap is made up by investment. Fall in investment leads to decline in income and employment. Investment depends upon marginal efficiency of capital and the rate of interest. Through multiplier effect an increment in investment results in multiple increase in national income. Employment increases. This theory of employment constitutes Keynes's theory of development.

The theory, though quite ingenious, hardly applies to less developed countries due to prevalence of peculiar conditions in these countries.

Compiler

KEYNESIAN THEORY OF TRADE CYCLES (*Business cycles)

"The pure theory of business cycles was never one of Keynes's primary interests". Nor did he develop a special theory of trade fluctuations as such. However, his broad views in his *General Theory* (1936) were justly conferred by his followers the status, "Keynesian theory of trade cycles".

In the words of Dudley Dillard—one of the best authorities on Keynesian economics—"It is much more and much less. It is more than a theory of business cycle in the sense that it offers a general explanation for the level of employment quite independently of the cyclical nature of changes in employment. It is less than a complete theory of business cycle because it makes no attempt to give a detailed account of the various phases of the cycle and does not examine closely the empirical data of cyclical fluctuations, something which any complete study of the business cycle would presumably do".

According to Keynes, A trade cycle is composed of periods of good trade characterised by rising prices and low unemployment percentages, altering with periods of bad trade characterised by falling prices and high unemployment percentages". This was his view in *A Treatise on Money* (1930).

In this *General Theory* (1936), Keynes maintained, "trade cycle can be described and analysed in terms of the fluctuations of marginal efficiency of capital relatively to the rate of interest". He wrote, "The essential character of the trade cycle and especially the regularity of time-sequence and of duration which justifies us in calling it a cycle is mainly due to the way in which the marginal efficiency of capital fluctuates. The trade cycle is best regarded, I think, as being occasioned by a cyclical change in the marginal efficiency of capital".

In the opinion of Keynes, crisis is brought about by a sudden collapse of the M.E.C. In the same way, recovery is brought about by revival in M.E.C. The turning points—the lower and upper—are caused by upturn and downswing in marginal propensity to consume.

Compiler

KEYNESIAN UNEMPLOYMENT (*Keynesian economics)

In contrast to Marxian unemployment, Keynesian unemployment denotes a situation in which the flow of investment is insufficient to mop up the savings that would be forthcoming at full employment levels of income.

Mark Blaug

KHUSRO, ALI MOHAMMED (B. 1925) (*History of economic thought)

An eminent Indian economist.

Dr. A.M. Khusro, a specialist in agricultural economics, was born on 1st, May 1925 at Hyderabad (Andhra Pradesh). Son of Mr. Aminuddin

Husain and Mrs. Fareedunnisa, Professor Khusro is married to Zainub, Tyaba. The Khusro's have one son and one daughter.

Dr. Khusro passed B.A. and B.A. (Hons) from Madras University and obtained Ph.D. from Leeds.

Khusro was:

1. Lecturer in Economics, Osmania University, (1952-54),
2. Director of Socio-economic Research, (1945-57),
3. Visiting Professor, Fletcher School of Law and Diplomacy, U.S.A. (1966),
4. Indian Delegate to International Agricultural Economic Conference, (1958) and (1970) U.N. Conference on Trade and Development (UNCTAD), New Delhi, (1968),
5. President, Indian Agricultural Economic Association, (1968),
6. Chairman, PL-480 Investigation Committee, Government of India, (1968),
7. Director, State Bank of India, Delhi, (1968-70), and
8. Director, Reserve Bank of India, since 1970.
9. Vice-Chancellor, Aligarh Muslim University.

He is a member of Indian Economic Association, Indian Society of of Agricultural Economics (and its Executive Committee) and National Commission on Agriculture.

He is on the editorial boards *Indian Journal of Agricultural Economics* and *Indian Economic Review*.

Khusro was also the Director of Institute of Economic Growth, University of Delhi. Since 1957 till he became the Vice-Chancellor, he was Professor of Economics at Delhi University.

Apart from a number of papers, he has written several books which include:

1. *Economic and Social Effects of Jagirdari Abolition and Land Reforms in Hyderabad*,
2. *The Problem of Co-operative Farming in India* (jointly),
3. *Economic Development with No Population Transfers*.
4. *Reading in Agricultural Development* (ed),
5. *Economics of Land Reforms and Farm Size*, and
6. *Economics of Buffer Stocks and Storage*.

Dr. Khusro has been a member of the Economic Advisory Council of the former Prime Minister (late) Mrs. Gandhi, which was constituted on February 7, 1983.

Compiler

KIBBUTZ (*Agricultural economics)

The earlier rigid type of co-operative farming in Israel.

Compiler

KINDLEBERGER, CHARLES P. (*History of economic thought)

A world famous M.I.T (U.S.A.) economist. His writings deal with economic development, international trade and other subjects. Kindleberger is B.A. from Pennsylvania University and M.A., Ph.D. from Columbia University. Before joining M.I.T. he served with the Federal Reserve Bank of New York, the Bank for International Settlements, the Board of Governors of the Federal Reserve System, the Joint Economic Commission of the U.S. and Canada etc.

Kindleberger's important published works are:

(i) *The Terms of Trade* (1953),
(ii) *Economic Development* (1958),
(iii) *Power and Money* (1970).

Compiler

KINKED DEMAND CURVE (*Theory of value)

The demand curve under monopoly. It is also preferably called Kinky demand curve.

It may have one or several kinks. Under oligopoly it has only one kink.

Compiler

KINKY DEMAND CURVE THEORY (*Theory of value)

Put forward by Paul M. Sweezy (U.S.A.), R.L. Hall and C.J. Hitch (England), the kinky demand curve hypothesis is perhaps the most popular oligopoly model. It explains not how price is determined in oligopoly, but why price once determined remains rigid or unaltered.

According to the theory, the demand curve has a kink at the level of prevailing price. The kink is formed at the prevailing price level because the segment of the demand curve above the prevailing price level is highly elastic while that below the prevailing price level is inelastic.

Professor Willian J. Baumol remarks that the analysis "does show how the oligopolistic firm's view of competitive reaction patterns can affect the changeability of whatever price it happens to be charging".

Compiler

KINKS (*Theory oj value)

Sudden changes in slope at particular points of a curve.

A.L. Meyers

KLEIN, LAURENCE ROBERT (B. 1920) (*History of economic thought)

American winner of 1980 Nobel Prize for economic science. While announcing the award on October 20, 1980, the Royal Swedish Academy

of Sciences cited Klein "for the creation of econometric models and their application to the analysis of economic fluctuations and economic policies". The Academy said, "Thanks to Klein's contributions, the building of econometric models has attained widespread use. It is now to be found throughout the world, not only at scientific institutions, but also in public administration, political organisations and large business enterprises." Klein, one of the world's foremost forecasters and econometricians, introduced to the U.S.A. in the early 1940's econometric model building.

L.R.Klein of Pennsylvania University, was born of Leo Byron and Blanche (Monheit) K. at Omaha, Nebraska, on September 14, 1920. He graduated (B.A.) from the University of California at Berkeley in 1942 with the highest honour in economics. He then studied under Professor Paul A. Samuelson—the first American Nobel Laureate in economics at the M.I.T. and completed doctoral thesis within two years in 1944. This thesis represented an attempt to restate mathematically the ideas of Lord Keynes as elaborated in his (Keynes's) *Ge, eral Theory* (1936). The thesis is now regarded as a classic. In 1944, Klein moved to Chicago University and helped construct a model for the U.S. economy. In 1947, Klein joined the faculty of the University of Michigan where with the aid of Ford Foundation grant, he developed the famous Klein-Goldberg Model—the first econometric model to be widely used for business forecasting.

In 1947, Laurence married Sonis Adelson and the Laurences have four Children—Hannah, Rebecca, Rachel and Jonathan. From 1949 to 1954, he worked as Research Associate in National Bureau of Economic Research Centre and from 1954 to 1958 in Oxford Institute of Statistics. In 1957 he passed M.A. from Lincoln College, Oxford University. After spending several years in England where he helped to construct an econometric model for the U.K. in 1958, Klein joined Pennsylvania University. Between 1958 and 1968, he served as professor of economics in the Universities of Osaka, Colorado, New York, Hebrew, Princeton, Stanford, Copenhagen and California. From 1970 to 1974, he served in the Institute for Advanced Studies in Vienna.

In 1960, Klein set up the Wharton economic forecasting associates which provides econometric forecasts and other services to corporate government and other clients. He was consultant to Canada Government (1947), UNCTAD (1966, 1967 and 1975), Macmillan Company (1965-74), E.I. du pont de Nemours (1966-68), State of New York (1969), Federal Reserve Board (1973) UNIDO (1973-75) Congress Budget Office (1977), the U.S. Council of Economic Advisers etc., He has been an adviser to economic institutes in Austria and Israel. He has also served as visiting professor at the Universities of Osaca and Copenhagen.

Dr. Klein is the recipient of D.H.C. of Bonn University (1974), LL.D. (Hon.) of University of Michigan (1977), D.Sc. (Hon) of Widener College (1977) and Dr. Honoris Causa of University of Vienna (1977).

Professor Klein was the editor of *The International Economic Review*

(1959-65) and in 1976, he was put on the editorial board of *Empirical Economics.*

At present one of Klein's major interests is the development of project link, an ambitious model of the world economy. The Project focusses primarily on co-ordinating econometric models of various countries to help forecast international trade and capital movements. He has utilized his theoretical penetrating insight for policy making model so as to enable the economic administrators to do good for the masses. His work as a promoter of quantitative techniques and mathematics in economics has been unique.

Dr. Klein who currently occupies the Benjamin Franklin chair, was the principal adviser and coordinator of economic policies of Mr. Jimmy Carter during the latter's campaign for presidentship in 1975-76. During his visit to India in 1979, Klein advised the Indian Government to increase the country's trade with neighbours.

Dr. Klein is the author of many celebrated books, papers and articles. His important books are:

1. *A Keynesian Revolution* (1947),
2. *Economic Fluctuations* (1950),
3. *An Econometric Model for the United States* (with A.S. Coldberger) (1955),
4. *Scope and Methods of Central Planning Bureau* (1956),
5. *The Econometric Model for United Kingdom* (with others) (1959),
6. *The Efficiency of Estimation in Econometric Model* (edited R.W. Pfouts) (1960),
7. *An Introduction to Econometrics* (1962),
8. *A Textbook of Econometrics* (1965),
9. *Econometric Gaming: A Kit for Computer Analysis of Macro-Economics* (1969),
10. *Econometric Analysis of Tax-cut of 1964* (edited J. Duesenberry) (1969),
11. *Short-run Predition and Long-run Simulation of the Wharton Model* (1972)
12. *An Essay on the Theory of Economic Predition* (1970).

In his book *Keynesian Revolution* (this title became a famous term), Klein presented a beautiful presentation of Keynesian theory and an excellent comparision between Malthus and Keynes. His *Theory of Economic Predition* which gave him immortal recognition, dealt with the precedure, limitations and cautions of economic forecasting.

His "Theories of Effective Demand and Employment" attempts to recast the Marxian system into an econometric model with specific behavioural assumptions.

Professor Klein, a pioneer in empirical studies and operational research, possesses the unique genius of writing for advanced researchers as well as beginners to econometrics.

Compiler

KNIGHT, FRANK HYNEMAN (1885-1972) (*History of economic thought)

One of the greatest American economists. In his hands "economic theory became a grand exercise in rarefied abstractions".

Born in Mclean country, Illinois, Knight did B.Sc and M.A. in German and went to Cornell University for Ph.D. He joined Chicago University as instructor. In 1928 he became Professor of Economics at Chicago University.

Dr. Knight—a very influential economist—has the following works to his credit:

1. *Risk, Uncertainty and Profit* (1921), (This is his doctoral thesis and incidentally the most important book of his),
2. *The Ethics of Competition and Other Essays* (1935),
3. *The Economic Order of Religion* (1945),
4. *Freedom and Reform* (1947),
5. *The Economic Organisation* (1951),
6. *On the History and Method of Economics* (1956) and,
7. *Intelligence and Democratic Action* (1960).

Besides, he wrote several learned articles for prestigious journals.

To Knight economics is not a descriptive discipline; it is an abstract normative science. The aim of economics is to satisfy human ends. He does not believe in the law of eventually diminishing marginal utility.

Knight a "Chicago School libertarian" was an apostle of *laissez-faire* and an opponent of new economics.

Professor J.A. Schumpeter finds truth in Knight's indictment that the 'classics' had "no clear or definite conception of the meaning of *economy* as a process of maximising a value return" and that "the problem of *distribution* was not approached as a problem of valuation at all" (This was with reference to Ricardo's theory of production and distribution).

Knight opened his vigourous attack upon Bohm-Bawerk's teaching in 1933 ("Capitalist Production, Time and the Rate of Return") that evoked a lively controversy spearheaded by ebullient Nicholas Kaldor.

P.A. Samuelson writes, "Frank Knight, a famous University of Chicago economist of the last 50 years, had an important (profit) theory that all true profit is linked with uncertainty".

Paying tributes to Knight's theory of profits, Schumpeter wrote in

his *History*, "To Knight we owe, in the first place a very useful emphasis upon the distinction between insurable risks and non-insurable uncertainty; and in the second place, a profit theory that linked this non-insurable uncertainty on the one hand to rapid economic change—which, barring extra economic disturbances, is the main source of uncertainty and on the other to differences in business ability—which are more obviously relevant to explanation of profits and losses in conditions of rapid economic change than they would be otherwise. He thereby achieved a synthesis that is not open to the main objection against the ordinary type of risk theories".

It is significant that Knight covers the history of profit theory to the publication of his landmark—*Risk, Uncertainty and Profit.*

Knight, aggressive and intolerant as he was, described the entire notion of 'factor of production' as "an incubus on economics' and asked that it should be eliminated from economic discussion as summarily as possible".

Knight vigorously sponsored D.I. Green's felicitious term "opportunity cost".

For a long time the economists could not make up their minds whether the short-run supply curve of labour was positively or negatively inclined. In his *Risk, Uncertainty and Profit.* Knight argued that it was always negatively inclined. He said that at the margin of indifference, the rational worker would equate the marginal utility of income. He showed that a rise in wage rates lowered the worker's schedule of the marginal utility of money.

Professor Knight introduced C. Menger to English knowing people.

There took place a long "Knight-Robbins Controversy" over the supply curve of labour to which allusion is made above.

Adverting to Knight's profit theory, Prof. M. Blaug notes "It was Knight's contribution to show that the presence of uncertainty about the future may allow entrepreneurs to earn positive profits despite product exhaustion and competitive equilibrium. According to Knight, profit is simply not due to dynamic change or risk but due to a unique kind of risk not susceptible to measurement, namely, the uncertainty generated by dynamic change".

Knight after repeated denial that it is possible to generalize about time preference, espoused a pure productivity theory of interest. He argued that in equilibrium, the rate of interest would be equal to the annual yield of an investment divided by the cost of investment.

In 1933, Knight reopened the old debate on Capital theory. It raged without being resolved.

Compiler

KNOW-HOW (*Economics of development)

The modern word for technical advice and assistance.

Norman Crump

KOLKHOZ (*Agricultural economics)

A Russian association of farmers who pool their lands irrecovably for joint cultivation.

Compiler

KONDRATIEFF CYCLES (*Business cycles)

Long-waves—the business cycles made up of six Juglar cycles, i.e. 50-60 years.

They were discovered by Kondratieff, a famous Russian economist and hence the name Nikolai Kondratieff cycles.

Compiler

KOOPMANS, TJALLING CHARLES (B.1910) (*History of economic thought)

A renowned Dutch-born American econometrician. Along with Russia's mathematician Kantorovich, he won the $ 143,000 strong Nobel prize in Economics for the year 1975.

Born of Sjoered and Wijktske (Van der zee) Koopmans on 28th August 1910 in Holland, he did his M.A. in 1933 and Ph.D. in 1936. He married Truus Wanningen in 1936 and the Koopmans have three children. Educated at the Universities of Utrecht and Leiden, Koopmans served as Teacher in Netherlands University Rotterdam from 1936 to 1938. He was Specialist, Financial Division, League of Nations, 1938-40; Research Associate, School of Public and International Affairs, Princeton, 1940-41; Economist, Penn Mutual Life Insurance Company, 1941-42; Statistician, Combined Shipping Adjustment Board and British Merchant Shipping Mission, 1942-44; Research Economist, University of Chicago, 1944-45; Associate Professor, 1946-49; and Professor Economics, 1948-55. Since 1955 Koopmans has been Professor of Economics in Yale University. He is also Fellow, Econometric Society and National Academy of Science.

Professor Koopmans has also worked as lecturer in New York University (1940-41) and Frank W. Taussig Professor in Harvard university (1960-61).

Dr. Koopmans was awarded the Nobel prize in economics for his having independently "renewed, generalised and developed methods for the analysis of the classical problem of economics on the optimum allocation of resources.

Professor Koopman's outstanding publications include:

1. *Activity Analysis of Production and Allocation* (edited) (1951).

2. *Three Essays on the State of Economic Science* (1977)
3. *Studies in Econometric Method* (edited) (1953).
4. *Scientific Papers of T.C. Koopmans* (1970).

Of these *Activity Analysis* is the most important work which won for him the Nobel prize. It is a basic reference on linear programming.

Professor Koopmans, one of the orginators of econometrics, independently developed the technique of linear programming which has been used by the national planners to solve the problems of maximizing output and by individual industrialists to make more efficient such operations as inventory control and cutting metal parts from steel sheets.

Koopmans applied the tools of mathematics to problems of efficient production. He has made fundamental contributions to three major areas of econometrics. In 1939, he contributed an empirical investigation with his monograph *Tank Freight Rates and Tankship Building*, on which he worked for 20 years. The result was known as a system of precise and workable procedures which have often been identified with econometrics. Dr. Koopmans in his *Liner Regression Analysis of Economic Time Series* (1936) explained why the general principles advanced by R.A. Fisher should be applied. Another significant contribution of his is about errors on variables'. He studied the maximum likelihood estimates for model containing such errors. He proposed confidence intervals and tried to evaluate how much the presence of errors on independent variables vitiated the coefficients of a multiple regression that neglects them.

Dr. Koopman's contribution to econometric methodology is monumental. To cite three of them which are universally recognized: (i) a tremendous conceptual clarification, (ii) the derivation of workable inference procedures, and (iii) the theoretical study of the properties of these procedures.

Koopmans' major contribution is activity analysis. He derives what are essentially dual variables to the supposedly optimal use of a transport network.

In his *Three Essays on the State of Economic Science* (1957), Koopmans presented a clue to understanding of modern welfare theory.

In 1953, he published his first note on intertemporal utility maximization and the optimal allocation of resources over time. He has given a very lucid presentation of turnpike theorem and of the optimal growth model.

It is worth noting that before Koopmans, no economist had been so serious about accepting the standards of modern science.

Koopmans explained with clarity why an appropriately chosen set of prices sustains an efficient programme. If we are able to understand today better what prices can and cannot do, it is because of the concern for rigour that Koopmans introduced in the theory of allocation of resources.

"Dr. Koopmans has spent much time in writing excellent expositions of difficult subjects. Knowing that by doing so, he was assisting in the proper diffusion of the newly derived theories or methods".

"Is measurement" asked Koopmans, "without theory feasible or fruitful in economics"? He is of the view that we are now in the Newton stage", in which interference must be based on rigorously specified models. He does not specialize in *ad hoc* theorizing on particular problems. On the contrary he is concerned with the major economic issues. When he discusses a specific issue, he always studies its implication's for broader principles. Koopmans who has written a good deal on macro-economic models of business fluctuations, observes, "In general, the state of micro-economic theory is unsatisfactory". He is more at ease with normative or ethical economics.

In 1966 while discussing the optimal growth theory, Koopmans conveyed the important message: "There are important problems of economic organization which do not depend on institutions and can be better solved with economic thinking than without it."

Along with Kenneth J. Arrow (the previous American Nobel laureate) and G. Debreu (another Nobel laureate) Koopmans has provided new proof of the Invisible Hand Theorem in terms of "activity analysis", that is, the application of linear programming methods to general equilibrium theory. The chief coutribution of the new approach has been to highlight the problem of "free goods" in standard welfare economics.

Koopmans restated Paretian welfare economics in terms of activity analysis in his another work *Three Essays on the State of Economic Science* (1957). This book brings the students to the frontiers of modern mathematical economics without causing pain.

Compiler

KRISHNAMACHARI, V.T. (1881-1964) (*History of economic thought)

A noted economic expert of India. During his tenure as the Deputy Chairman of the National Planning Commission, he wrote a significant book, *Planning in India* (1961). He emphasised the growth of heavy and basic industries because they provided the foundation for further and larger industrial development without undue dependence on external help.

Compiler

KRISHNA MURTHY, B.V. (*History of economic thought)

A noted Indian economist. Dr. Krishna Murthy whose doctoral dissertation *Pricing in a Planned Economy* (1950) is widely recognised as a significant contribution to economics, introduced in 1960, the concept of the u-sector (the upper-class sector) in the context of development planning. According to it, the benefits of planned investment flow to the u-sector.

Compiler

KUZNETS, SIMON (B. 1901) (*History of economic thought)

Professor Simon Kuznets is one of the greatest American economists of the world and the most important pioneer in providing national income data in the U.S.A.

Dr. Kuznets was awarded the Nobel Prize in Economics for 1971 for his 500 and odd page work *Modern Economic Growth: Rate Structure and Spread.* The Swedish Academy of Science announced that the prize was awarded to Professor Kuznets for his empirical interpretation of economic growth which opened the way to a new and profound understanding of the economic and social structure and the process of development. The Academy added: "More than any other scientist, he has illuminated with fact—and explained through analysis—the economic growth over the past 100 years".

Although Kuznets "is not the glamour boy of the profession, in terms of his contribution to society he is way ahead of almost anyone else". "He has a way of making the numbers sing". "He can look at the data that would leave another man blank—but he comes up with an original provocative idea". According to Professor John R. Meyer of Yale University, Prof. Kuznets "has almost no peer as a coiner of socio-economic hypotheses".

A native of Czarist Russia, Simon Kuznets was born on April 10, 1901 in the city of Kharkov, in the Ukraine. He is the second of three sons of Abraham Kuznets who migrated to the U.S.A. in 1907 when Simon was six years old. Simon and his elder brother joined Abraham in New York city in 1922. While he was in Russia as a boy, Kuznets studied economics and was convinced that "economics is the basic of all social problems." After his immigration to America, Kuznets studied advanced economics at Columbia University. In 1923 he obtained the B.A. degree and the M.A. degree in 1924. While completing his doctoral dissertation with Wesley Clair Mitchell—a brilliant specialist in business cycle analysis—Kuznets served as a fellow with the Social Science Research Council. In 1926, Kuznets was awarded his Ph. D. degree by Columbia University. The next year, Professor Mitchell founded the National Bureau of Economic Research and Kuznets became a member of its staff.

In 1930, Kuznets became an Assistant Professor of Economic Statistics at the University of Pennsylvania. In the wake of the October 1929 Wall Street Crash and the Great Depression, the Government of U.S.A. authorised Kuznets and the Bureau to collect official income estimates. He executed the assignment superbly. He expanded his project by employing national accounts as the principal basis for economic studies of prosperity, depression and growth potential. Dr. Kuznets refined his statistical data for measuring the nation's economic growth. He defined the national product as national income plus expenditures on consumer goods and services.

With the advent of the World War II, Kuznets became Associate Director of the Bureau of Planning and Statistics of the War Production Board. In 1954 he became a Professor of Economics at John Hopkins University. In 1960 he was invited by the Harvard faculty. Throughout his career, has been a member of the National Bureau of Economic Research—the non-profit agency that has supported his major studies.

Active in many professional organizations, Dr. Kuznets has served as President of both the American Economic Association and the American Statistical Association of which he is also a Fellow. He is a Fellow of the Econometric Society of England. He is a member of the International Statistical Institute, the American Philosophical Society and the Royal Swedish Academy of Science, the organization which awarded him 87,000 Dollars worth Nobel Prize in economic science. The Social Science Research Council named Kuznets Chairman of the Committee on Economics of Mainland China. He formulated the curriculam for the Graduate School of Economics at the National University of Taiwan and often lectured there on economics. Kuznets delivered the Marshall Lectures at the University of Cambridge in 1969. Honorary degrees have been conferred on him by Harvard, Princeton, Columbia, Pennsylvania and the Hebrew University of Jerusalem. He was associated with the National Income Committee of India in the early 1950's and the Government of China as Economic Advisor.

Short in stature and slender in build, Professor Kuznets has dark, twinkling eyes and an impish grin. A kindly, quiet man, he is modest to the point of reticence about his accomplishments. Since the retired from the Harvard University in June 1971, he finds a little more time to indulge in his favourite recreation of listening to classical music, but his writing and research has continued uninterrupted.

Professor and Mrs. Kuznets, the former Edith Handler, met at the National Bureau of Economic Research where she worked as an economist. They were married on June 5, 1929 and have a son Paul who is on the Faculty at the University of Indiana, and a daughter Mrs. Norman Stein, who teaches at the University of Rochester.

Always looking ahead to the next project, Kuznets has a zest for economics that continues unabated. "What drives me?" he asks, "A great curiosity and a great delight in discovering something I did't know before."

Dr. Kuznets's major publications include:

1. *Cyclical Fluctuations, Retail and Wholesale Trade* (1926),
2. *Secular Movements in Production and Prices* (1930),
3. *Seasonal Variations in Industry and Trade* (1933),
4. *National Income and Capital Formation* (1933),
5. *Commodity Flow and Capital Formation* (1937),
6. *National Income: A Summary of Findings* (1946);

7. *Income and Wealth of the United States—Trends and Structure* (1952),
8. *Economic Change* (1953),
9. *Shares of Upper Income Groups in Income and Savings* (1953),
10. *Six Lectures on Economic Growth* (1959),
11. *Capital in the American Economy, Its Formation and Financing* (1961),
12. *Post-War Economic Growth* (1964),
13. *Economic Growth and—Structure Selected Essays*, and
14. *Economic Growth of Nations.*

Dr. Kuznets shares the belief that economics can be transformed from an idealogy to a science by careful measurement and quantitative analysis. Along with Mitchell, putting the theory into practice, Kuznets initiated a programme for estimating and analysing the United States' National Income, including the sum of earnings flows such as wages, interests, profits and rent. He explored the evolving patterns of America's development in terms of economic structure. His system for determining growth eventually became the basis for the concept now called the Gross National Product, which Galbraith has called "one of the greatest discoveries of all time." Now used by nations throughout the world to forecast their economic potential, G.N.P. records the actual output of a nation's goods and services and is the standard international index of its wealth. The United States of America uses Kuznets's method for assessing her G.N.P.

Although Kuznets has never been considered a revolutionary economist, he has made a pioneering contribution to economics as a synthesizer who collects the facts and applies them to the theories of others. In his *National Income and Its Composition, 1919-1938*, he provided the scaffolding for much of the national incomes accounting on which Keynes relied for many of his classic studies. By analysing and measuring the historical data of many nations, Kuznets hoped to establish guidelines for the successful economic growth of underdeveloped countries. He also examined certain domestic trends, especially, the changing roles of capital, labour and productivity. In his significant study *National Product since 1969*, Kuznets analysed net capital formation in the periods 1869-78 and 1919-28. He found that net capital formation which constituted 10 to 15 per cent of the national income, increased during these years from an average of 1.2 billion Dollars to 7 billion Dollars. He found that between 1869-78 and 1929-38 national income in terms of 1929 prices increased sevenfold while per capita income doubled and per capita tripled.

He also coducted a comprehensive study of income levels and distribution patterns in the U.S. during the post-war era, discovering that a decline in the rate of growth of the national income was related to a

decline in the rate of growth of labour supply. After measuring income distribution in the United States, Kuznets concluded that the upper 5 per cent of the population received a smaller share of the pie in 1915 than in 1929, because of lower dividends, interest rates and property returns, all of which had suffered since the depression period. A similar study in 1953 indicated that the upper 7 per cent had lost considerable purchasing power and suffered a sharp decline in income as a result of high taxes and domestic economic policies.

In his most tauted book, *Economic Growth of Nations : Total Output and Production Structure* (1971), Kuznets criticised the ctitics of growth for being harsh in their evolutions and plainly demonstrated that some costs of growth—especially urban improvements could be paid for by the national accounts. He explained: "If the purpose of the national income accounts is a real estimate of the long-term improvements in the United States economy, then you must examine every expenditure very carefully."

Simon Kuznets, a discovery of Mitchell, is the founder of the Conference of Research in Income and Wealth and co-founder of the International Association for Research in Income and Wealth. His contribution reflects the sequence of his own interests: from business cycles to national income to economic growth. His work reads like an intellectual diary.

Prof. Kuznets's tool-box consists of macro-economic variables like national income, capital formation and per capita income. As noted already GNP is the famous term coined by Kuznets. Earlier studies pertained to a consideration of merely NNP (Net National Product). The hallmark of Kuznets's approach to business cycle theory is that it emphasises empirical verification. His work aims at the measurement of secular trends and seasonal variations thus filling the statistical gap.

According to Professor P.R. Brahmananda of Bombay, Kuznets's monumental work on "Commodity Flow and Capital Formation" is a scientific and pioneering document on the methodology of estimating capital formation. In general this volume could be turned as a "treatise on commodity-flow approach" in view of the standard methodology explained for the first time for estimating each of the components of capital formation."

Professor Kuznets's income analysis is the interspatial and inter-temporal study of income levels.

His essential contribution in the field of economic growth is both theoretical and empirical. He projects his analysis to cover the quantitative aspects of the economic growth of nations encompassing monumental statistical work relating to developed and developing countries.

Modern economic growth for Kuznets, begins with industrialisation, i.e. from the middle of the eighteenth century in the West and currently occuring in the developing countries. It has two distinctive features: in all

cases it involves a sustained and substantial rise in product per capita and in almost all cases it involves a sustained and substantial rise in population.

Dr. Kuznets summed up the economic requirement of modern industrialisation as:

1. the availability of effective resources in other sectors of the economy, especially agriculture and transport,
2. the capacity to convert the surplus labour and capital resources into forms required by modern industry,
3. a scale of preference at home that assures markets for the products of modern industry, and
4. institutional conditions that channel available entreprenurial talent into modern industry.

Besides the above mentioned major fields of specialisation, Dr. Kuznets was also perhaps the earliest to write on economics of education.

He also wrote on war economics. In all his works he combined great statistical skill and analytical ability. His work does not involve the use of mathematics except in his study relating to professional incomes published jointly with Milton Friedman of Chicago University.

The contribution of Prof. Kuznets is more in the form of additions to tested knowledge than in terms of policy prescriptions.

LABOUR (*Economics of labour/Theory of value)

Any exertion of mind or mind undergone partly wholly with a view to some good other than the pleasure derived directly from the work is called labour.

Alfred Marshall

(*Note*—Marshall attributes the above definition to Jevons. The latter, however, includes only "painful exertion."—Compiler.)

All types of workers from captains of industry of *navviers* (digging labourers).

F. Benham

Labour includes the very highest professional skill of all kinds as well as the labour of unskilled workers and artisans and of those employed in education, in fine arts, in literature, in science, in the administration of justice and in Governments in all its branches; and we must include also not the labour that results in the firmament form but also that renders services which persists in the act.

J.S. Nicholson

All human effort either physical or mental expended in the process of production.

A.L. Meyers

A factor of production.

A.K. Cairncross

The group of workers who are either already in employment or are available for employment, given the opportunity.

A.K. Cairncross

In a broad sense, any hand or brain work. Sometimes the term is employed for organised labour.

Richard A. Lester

All non-managerial employees who can earn their living primarily by selling their services directly to employers.

Richard A. Lester

The economic work of man whether with the hand or the head.

A. Marshall

It denotes not only physical toil but all human effort, either manual or mental, devoted to production.

Raymond Bye

LABOUR ECONOMICS (*Economics)

A branch of economics, which studies the evolution of wage labour (both manual and mental), its conditions of service as employees in industry (the term industry being defined in the widest sense to include agriculture, mining and other primary production, manufacturing, building and construction, trading and banking, transportation and communication) as well as other occupations and professions; Labour's share in the total national produce; the laws governing it and the likely trends in it; the ways and means to increase the employment opportunities; labour's relations with other parties participating in or connected with the given industry, occupation and profession and finally the status and role of labour in the process of social production.

V.B. Singh

LABOUR FORCE (*Economics of labour)

The labour force or working force denotes that part of population which is economically active or "gainfully employed."

Joseph J. Spengler

All persons in or seeking, paid employment or who are self-employed.

G.L. Bach

The total of the employed and the unemployed at a given time.

Fairchild, Buck and Slesinger

The aggregate supply of labour is often identified with labour force, which is officially defined (in the American sense) as the total, in any one week of all persons, 14 years of age and older who are self employed, or employed by others, or are unemployed, or are in the Armed Forces. Of this total, many millions are independent owners and entrepreneurs.

D.S. Watson

LABOUR MARKET (*Economics of labour)

The term may mean:

1. The work-community area,
2. The area of wage determining forces,
3. The place where the labour purchase and sale occurs,
4. an occupation and its labour mobility area.

Richard A. Lester

LABOUR MOVEMENT (*Economics of labour)

The term is used to designate all of the organised activity of wage earners to better their own conditions either immediately or in the more or less distant future.

Encyclopaedia of Social Sciences

LABOUR PROBLEMS (*Economics of labour)

The economic and social issues that grow out of work for pay. They include not only industrial unrest, labour unions and slow-downs or strikes but also threats of wage loss from unemployment and other forms of economic insecurity.

Richard A. Lester

LABOUR PRODUCTIVITY (*Economics of labour)

The ratio of production-output to labour-input.

S.R. Saxena

LABOUR SAVING INVENTION (*Economics of labour)

One that raises the marginal productivity of capital more than that of labour.

J.R. Hicks

LABOUR THEORY OF VALUE (*Theory of value)

It states that everything is produced by labour. Lord Keynes sympathises with this theory.

Dudley Dillard

Karl Marx said that all value is created by labour and that rent, interest and profits, represent exploitation of workers.

F. Benham

The theory states that the "natural" value of a commodity depends on the amount of labour embodied in it on the "toil and trouble" bestowed on its production.

A.K. Cairncross

Ricardo was justified in accepting the labour theory of value in 1817 because fixed capital was little used at the time, but when he qualified the theory three years later he simply "yielded to the victorious March of mechanisation".

According to Ricardo and Malthus, the only source of value is the "Male" factor of labour.

Mark Blaug

The simple labour theory of value said that the price ratios of goods can be predicted from labour costs alone independently of the utilities which bring out a demand for the goods.

P.A. Samuelson

The Classical labour (cost) theory of value asserts that goods are exchanged against one another according to the relative amounts of labour embodied in them.

This doctrine is valid under the assumptions that all labour is of the same quality, of the same irksomeness, that every occupation is open to all, that labour is the only mobile factor of production, and that there is free competition between the workers. In reality some of these assumptions are never true and some are not always true, so that the labour theory of value, at least in its simplest form, breaks down.

The Theory of comparative cost developed out of the Classical labour theory of value.

The sole function of the labour theory is to determine the relative prices.

Gottfried Von Haberler

The labour theory of value which is associated with the names of David Ricardo and Karl Marx is found to be incorrect and untenable.

However, it has not been possible for the economists even to this day to expunge it from economic discussion.

Compiler

LABOUR VALUE OF MONEY (*Monetary economics)

It may arbitrarily be defined as the value of money to a man or a business firm that wants to hire every variety of labour.

Geoffrey Crowther

The amount of labour of a given quality which a unit of money will command.

Sir D.H. Robertson

According to Crowther, labour value of money is one of three different standard values of money, the other two being (i) wholesale value of money, and (ii) retail value of money.

Compiler

LABOUR UNION (*Economics of labour)

Trade union. An independent and voluntary association of workers having no organic affiliation with any employer and organised for the purpose of maintaining or improving the conditions of their employment.

Fairchild, Buck and Slesinger

LABOURISTIC ECONOMY (*Economics of development)

The term was suggested by Sumner Slitcher for America.

P.A. Samuelson

LABOUR'S MARGINAL PRODUCT (*Theory of value)

The extra output you get when you add one unit of labour holding all other inputs constant.

Paul A. Samuelson

LAISSEZ-FAIRE (*Economics of development)

A policy of non-intervention by the state in the economic life of the country.

Adam Smith condemned economic interference by the State as "folly and presumption".

J.L. Hanson

Complete governmental non-interference with business. Thomas Carlyle called it, "anarchy plus constable".

P.A. Samuelson

The idea of laissez-faire can traced to the earlier Italian economists as for example Serra in the 17th century. The maxim itself *laissez-faire*,

laissez-passer--derives from 18th century France and has been commonly attributed (Schumpeter is one of them) to Jacques C.M. Vincent de Gournay (1712-59). Turgot ascribes the phrase *laissez nous faire* to Legendre. The expression has been sometimes ascribed also to d' Argenson. J.S. Mill was the first Englishman to use the phrase *laissez-faire* in his *Principles of Political Economy* (1848). Since then it has come to be identified most closely with the doctrines of the Manchester School in England. The word *Cobdernism* is often used in England as practically equivalent to *laissez-faire.*

Encyclopaedia of Social Sciences

LAKDAWALA, DHANSUKHAL TULSIDAS (b. 1916) (*History of economic thought)

A distinguished Indian economist. He is an authority on public fiinance and international economics. He was twice the recipient of Dadabhai Naoroji Award for distinguished work in economics. During his over 30 years' of chequered career in the University of Bombay, Lakdawala has taught more than 3,000 M.A. students, many of whom occupy distinguished positions as teachers in economics in Bombay University and its affiliated colleges and other Universities. More than 30 students have taken successful guidance under him for their Ph.D. dissertation. He has built up a successful and growing research centre in economics at Ahmedabad.

Born on October 4, 1916, Dr. Lakdawala is simple clad, soft spoken, reticent and unassuming. He is a voracious reader and an original thinker. The Lakdawalas have two sons.

Career

Dr. Lakdawala who has the credit of achieving fame at an young age, has held the following important positions:

1. Chairman, Cost of Living Index Committee, Government of Maharashtra.
2. Member, Review Committee of the Tariff Commission, Government of India.
3. Member, Study Team of Financial Administration (Administrative Reforms Commission).
4. Member, Study Team on State Finance and Centre-State Relations (Administrative Reforms Commission).
5. Member, Central Wage Board for Cement Industry, Government of India.
6. Member, Central Wage Board for Iron and Steel Industry, Government of India.
7. Member, Central Wage Board for Port and Dock Workers, Govt. of India.

8. Member, Task Force on Educational Finance, Education Commission.
9. Honorary Director, Economic Survey of Greater Bombay (A Project entrusted to the Dept. of Economics, University of Bombay, by the Planning Commission).
10. Hon. Secretary and Treasurer, Indian Economic Association.
11. President, All-India Economic Association, 1964.
12. Export Consultant, ECAFE, Bangkok.
13. Honorary Economic Adviser, Dearness Allowance Commission, Govt. of India.
14. Member, Board of Directors, Life Insurance Corporation.
15. Member, Local Board of Directors, State Bank of India.
16. Chairman, Study Group on "Wage Policy", National Commission on Labour, Govt. of India.
17. Director, Deptt. of Economics, University of Bombay.
18. Member, Fifth Finance Commission, Govt. of India.
19. Director, Sardar Patel Institute of Economic and Social Research, Ahmedabad.
20. Member, Octroi Enquiry Committee, Government of Gujarat.
21. Chairman, Working Group of Fiscal and Financial Measures, Export Committee on Unemployment, Govt. of India.
22. Member, Review Committee, Indian Council of Social Science Research, Government of India.
23. President, Gujarat Economic Conference.

Dr. Lakdawala associated with (1) Indian Council of Social Science Research as General Editor for its Surveys in Economics, Chairman, Standing Advisory Committee in Economics and member of its several other committees; (2) Planning Commission (Member of some committees); (3) Study group on Export Strategy, Ministry of Commerce (Member); (4) Indian Institute of International Trade, etc.

Since long he has been the Editor-in-Chief of India's prestigious *Indian Economic Journal* which is published on behalf of the Indian Economic Association.

On June 1,1977 Dr. Lakdawala was appointed Deputy Chairman of the National Planning Commission.

Contribution to Economics

Dr. Lakdawala has conducted several outstanding economic surveys. He has published a number of thought-provoking and useful articles and papers on current economic problems. He has also participated in and submitted papers to a number of conferences and seminars in India and abroad. Prof. Lakdawala is the author of works such as:

1. *Price Control and Food Supply with Special Reference to Bombay City* (Jtly.) 1945,

2. *War and the Middle Class* (Jtly.), 1945.
3. *Price Control in India with Special Reference to Food Supply*, 1946.
4. *Justice in Taxation in India with Special Reference to British Gujarat*, 1946.
5. *International Aspects of Indian Economic Development*, 1951.
6. *Economic Survey of Saurashtra* (Jtly.), 1953.
7. *Taxation and the Plan*, 1956.
8. *Small Industry in a Big City—A Survey of Bombay* (Jutly.) 1961.
9. *Work, Wages and Well-being in a Metropolitan City* (Jtly.) 1963.
10. *Union-State Financial Relations*, 1972.
11. *Commodity Taxation in India.*
12. *Mobilisation of States' Resources*, 1972.
13. *Survey of Public Finance*, 1975.
41. *Optimum Utlization of Educational Expenditure in Gujarat*, (Jtly.), 1975.

The following are some of the articles, papers and reports published by Dr. Lakdawala:

Articles & Papers

1. "Anti-Inflationary Policy of the Govt. of India" (Jtly. with Prof. C.N. Vakil), *Hindustan Standard*, Puja Annual, 1944.
2. "Post-War Finance in India" Papers in Economic Silver Jubilee Volume, 1947.
3. "An Enquiry into the Conditions of the Refugees in Bombay City", *Bombay University Journal*, 1952.
4. "Incidence of Taxation in India", *Indian Economic Journal*, May, 1953.
5. "An Expenditure Tax", *Indian Economic Journal*, May, 1953.
6. Thoughts on Taxation Enquiry Commission's Report" *Commerce*, Annual Number, 1955.
7. "Expansion of Tax Revenues", Papers relating to the Second Plan, 1956.
8. "Internal State Trading in Commodities particularly as an Alternative to Additional Taxation", Papers relating to the Second Plan.
9. "Dr. Kaldor's Proposals for Indian Tax Reforms", *Commerce*, Annual Number, 1956.
10. "Some Difficulties in the Application of International Trade Theory to Rural-Urban Relationships", *Indian Economic Journal*, Vol. IV, No.3, January, 1957,

11. "Shops and Establishments in Greater Bombay" *Journal of the University of Bombay*, Vol. XXV, No. 4, January 1957.
12. "Report of the Finance Commission", *Economic Weekly* January 4,1957.
13. "Economic Aspects of Slums", Paper submitted on Slum Clearance Seminar organised by the Indian Conference of Social Workers, May 1957.
14. "Indian Public Finance", *Western German Economic Journal*, Special Number on India, 1957.
15. "Personal Taxation Proposals, 1957-58—Second Plan and Budget Supplement" *Amrit Bazar Patrika*, July 12,1957.
16. "Company Taxation Proposals, 1957-58", *Journal of the Indian Institute of Bankers*, September 1957.
17. "Foreign Aid in Indian Economic Development", *United Asia*, Vol. IX, No.4, September 1957.
18. "Economic Research in Gujarat", Presidential Address at the Gujarat Research Society's Conference held at Baroda, 2-3 November, 1957.
19. "Choice of Techniques in Consnmer Goods Industries", Conference Number of the Indian Economic Association, December, 1957.
20. "Rising Prices and Union Budget" (Jtly. Dr. M.V. Kahambadkone) *Indian Economic Journal*, Vol. VI, No. 1, July, 1958.
21. "The Pattern of Investment in the Two Plans" (Jtly. with Dr. M.B. Desai) *Souvenir Volume*, 10th International Conference, India, December 1958.
22. "Bombay Survey", A Paper submitted to the Social Scientists' Seminar organised by the UNESCO Research Centre, India, December 1958.
23. "An Enquiry into the Small and Medium Scale Engineering Industry Parts I and II". Part 1: *Journal of the University of Bombay*, January 1958; Part II: *Journal of the University of Bombay*, July 1959.
24. "Sensitivity of Central Taxes, 1953-54 and 1954-55" (Jtly. with Dr. M.V. Kahambadkone), *Economic Weekly* December 5 and December 12,1959.
25. "Contribution of Public Enterprise", *Indian Economic Journal*, April 1960.
26. "Commodity Taxation in the Third Plan", *Economic Weekly*, April 1970.
27. "Minimum Wage Policy in India". A Paper submitted to the International Seminar on Paths to Economic Growth, 1961.
28. "Some Aspects of Asian Common Market". A paper submitted to the Seminar on Asian Trade held under the auspices of the Institute of Development Economics, Karachi, 1961.

29. "India and the Common Market", *Asia Magazine*, March, 1962.
30. "Asian Economic Co-operation", *Economic Weekly*, Special Number, July 1962.
31. "International Economic Relations of India—Pre and Post-Independence". A Paper submitted to the Seminar on Socio-Economic Tensions of Economic Development in South-East Asia, 1962.
32. "Financing Our Defence", *Economic Weekly*, Annual Number, February 1963.
33. "Commercial Policy and Economic Growth". A Paper Submitted to the Seminar on International Trade sponsored by the Indian School of International Studies, March, 1963.
34. "Trends in Regional Co-operation in Asia" paper submitted to the Kuala Lumper Conference on Development and Co-operation, March, 1964.
35. "Aspects of Trade Policy in India". Presidential Address at the Annual Conference of Indian Economic Association, December 1964. Baroda (later published in the *Indian Economic Journal*, 1964).
36. "Trade and Commerce" Written for Chapter X of *Gazetteer of India*, Vol. III, Ministry of Education, Government of India, 1964.
37. "Review article on Palkiwala's "Highest Taxed Nation", *Journal of the Indian Institute of Bankers*, April 1965.
38. "Some Problems of Indian Federal Finance—Use of Balancing Devices need to be put on a Rational Basis" *Commerce*, Annual Number, 1965.
39. "Review of Four Finance Commissions" *Indian Economic Journal*, January 1966.
40. "A Scheme for a Revised Structure of Corporate Taxation", *Industrial March*, February 1966.
41. "Devaluation" *United Asia*, Vol. XVIII, No.3, May/June, 1966.
42. "Devaluation—Fiscal and Monetary Aspects" Challenge of Devaluation, Indian Merchants' Chamber, 1966.
43. "Some Problems of Economic Integration in South-East Asia", (Jtly. with Dr. R.H. Patil). Paper submitted to the Conference on Economic Interdependence in South-East Asia", organised by the University of Wisconsin, January 1967.
44. "The Role of Tariff Commission—Intention and Practice", *Indian Merchants' Chamber*, Diamond Jubilee Commemoration Volume, 1961.
45. "India's Economic Needs". Paper submitted to the India/Japan/Australia Conference held under the auspices of the Australian National University, Canberra, September 1967.
46. "Foreign Capital and Economic Development". Paper submitted

and read at the Golden Jubilee Session of the Indian Economic Association, Madras, December 1967.

47. "The Touchstone: Export of Manufactures", *Commerce* Supplement of UNCTAD, February 3, 1968.
48. "Two Issues at the UNCTAD" *Himmat*, March 1, 1968.
49. "Two Views of the Economy" *Commerce*, March 9, 1968.
50. "Gandhiji and Growth Economics" *Indian Economic Journal*, October-December, 1969.
51. "Additional Excise Duties", Gujarat Businessmen's Convention Souvenir, Gujarat Chamber of Commerce & Industry, January 1970.
52. "The Central Budget 1970-71" (Jointly with Shri K.V. Nambiar) *Commerce*, March 14, 1970.
53. "Resource Mobilization in Gujarat", *Commerce*, January 16, 1971.
54. "Commodity Taxation in India", (Jtly. with Sri K.V. Nambiar) *Anvesak*, Vol. I, June 1971.
55. "Prospects of Resource Mobilisation in India'. Presidential Address at the Gujarat Economic Conference, 1971. (Later published in *Artha Vikas*, Vol. 7, No.1, January 1972).
56. "Union-State Financial Relations". Paper submitted to the National Convention of Union-State Relations, New Delhi.
57. Review Article on Incidence of Taxation in Gujarat by NCAER" (Jtly. with Shri K.V. Nambiar) *Commerce*, January 16, 1972.
58. "The Problem of Unauthorised Overdrafts" *Commerce*, March 4, 1972.
59. "Union Budget, 1972-73—Neither Growth-Oriented nor Employment-Oriented" *Commerce*, March 25, 1972.
60. "A Weak Base for Recommendations"—Wanchoo Report on Direct Taxes, *Commerce*, July 1, 1972.
61. "Evolution of Union-State Financial Relations", *Commerce*, August 19, 1972.
62. "Mobilization of Savings and Financial Assets", (Jtly. with Dr. R.J. Modi) *Anvesak*, Vol. II, No. 2, December 1972.
63. "Spatial Economic Planning Models for India" (Jtly. with Dr. Y.K. Alagh and Dr. Atul Sharma) *Anvesak*, Vol. II, No. 2, December 1972.
64. "Centre-State Financial Relations". Key paper at the Annual Conference of the Indian Economic Association, December 1972.
65. "Central Budget, 1973-74" *Commerce*, Budget Number, March 1973.

Reports

1. Report of the Provident Funds' Committee, Bombay State (Member).

2. Report of the Technical Provident Funds' Committee, Government of India (Member).
3. Report of the Central Wage Board on Cement Industry Government of India (Member).
4. Report of the Minimum Wages Committee on Shops and Establishments, Bombay State (Member).
5. Report of the Cost of Living Index Committee, Government of Maharashtra (Chairman).
6. Report of the Review Committee of the Tariff Commission, Government of India (Member).
7. Report of the Study Team on Financial Administration, Administrative Reforms Commission, Government of India (Member).
8. Report of the Study Team on State Finance and Centre-State Relations, Administrative Reforms Commission, Government of India (Member).
9. Report of the Central Wage Board for Iron and Steel Industry, Government of India (Member).
10. Report of the Task Force on Educational Finance, Education Commission (Member).
11. Report of the Dearness Allowance Commission Government of India (Hon. Economic Advisor).
12. Report of the Study Group on "Wage Policy", National Commission on Labour, Government of India (Chairman).
13. Report of the Central Wage Board for Port and Dock Workers, Government of India (Member).
14. Report of the Fifth Finance Commission (Member).
15. Report of the Octroi Enquiry Committee, Government of Gujarat (Member).
16. Report of the Study Group on Fiscal and Financial Administration, Expert Committee on Unemployment, Government of India (Chairman).

Prof. Lakdawala is of opinion that foreign aid has contributed significantly in bolstering India's economic development. Specifically it has helped to lessen or remove the savings and investment gap, the balance of payments gap and budgetary receipts and expenditure gap, as also in removing specific material or skill bottlenecks. He adds a note of caution by observing that "there is nevertheless a good deal of anxiety as to whether this magnitude of reliance is not likely to make us politically more subservient and decide our national economic policies with reference to foreign interests' desires". He points out that the American aid is governed by the condition that it shall not be utilised for the setting up of industries in the public sector if it is possible to establish them in the private sector. Prof. Lakdawala hopes that the "unreasonable" U.S.

attitude will be revised. He feels that the donor countries should appraise the costs and benefits of the project aided by them. Lakdawala pleads for a sense of understanding on the part of the donor countries and to express their reactions in the form of suggestions rather than prerequisites for further aid.

Refering to terms of aid Lakdawala notes that the interest rate and the terms of repayment have "varied from time to time, donor to donor, loan to loan and even purpose to purpose." He reiterates the need for rescheduling the debt repayments, otherwise the purpose of aid itself will be defeated, for "If the foreign aid is conceived as a long term programme lasting more for a generation than a decade, during this entire period, the recipient nations will need all their current earnings and more for their development and interest payment could only be made by increasing gross aid". He maintains that the donor countries should largely give grants other than loans.

While delivering the Presidential address to the 47th Annual Conference of the I.E.A. in 1964 he observed that "in the last 17 years that have passed since Independence, the efforts at planned rapid economic development have brought about many new situations in Indian foreign trade, leading to far reaching changes in foreign trade policies. The new policies have, however, not been consistent, purposive and well integrated with other developmental policies".

He observed "the assumptions of constant or increasing opportunity costs and fixed production possibilities on which the theory of comparative costs has been based run absolutely counter to changes in the quantity and quality of factor supplies and improvements in technology, on which development largely depends." He argued that, exports in India have never been an engine of growth.

It is essential that the import requirements of the plan should be very carefully ascertained and dovetailed with our import capacity. There should be no uncovered gap between the two. Adequate provision should be made for maintenance imports. It is no use planning for industrial capacity targets which necessitate developmental imports in excess of what we can afford. There must be frequent checks on the cost-price behaviour of import substitution industry and a certain annual increase in their productions must be insisted upon. That is the very logic of development. In the absence of such safeguards, waste and inefficiency are likely to assume alarming proportions. Mere price control which will resist any price increase is no remedy specially when it is partial and operates against an unsympathetic background.

In his *Small Industry in a Big City*, Prof. Lakdawala remarks that: Factories only employ a small portion of our industrial population and account for a large but still small ratio of our industrial production.

Commenting upon Nicholas Kaldor's *An Expenditure Tax*, Dr. D.T. Lakdawala warned in April 1956 thus: "Under the prevailing

conditions of grave shortage of trained revenue staff, addition of an entirely new and complicated tax basis like expenditure is not a promising venture, and not to be lightly entered upon unless the rewards are sure and substantial. Capital formation is an urgent need in India, but public savings out of tax revenues, other compulsory savings, like provident funds, and if necessary direct curtailment of domestic production and imports of luxuries are a more powerful and surer method to achieve the purpose."

In his famous book *Commodity Taxation in India*, Prof. Lakdawala by observing "While direct taxes which fetch much less, and affect only a few, have been subjected to thorough and critical examination, commodity taxation as a whole since the Report of the Taxation Enquiry Commission (1953-54), has received little attention", makes an effort at restoring some of the balance by focussing on the need and steps for rationalisation and co-ordination of the Indian commodity tax structure.

He says that taxation of commodities being (1) non-adjustible to the personal circumstances of the final tax-payer, (2) regressive in nature, and (3) inflexible to income changes, and thus differential tax rates on different commodities can, to some extent, be used to remedy these deficiencies; but the regulatory objectives of commodity taxation can also aggravate horizontal and vertical inequalities. He points out that the burden of Indian commodity taxation on families of different sizes with the same income or expenditure has not been worked out.

He argues that land revenue burden is very low on the higher rural groups, and direct taxes are collected from a very small number. He observes, "Looking at the Indian commodity tax structure as a whole, one is immediately struck by its irrationality . . . sales tax rates are more rational on the whole but being levied at a state level they suffer from severe jurisdictional difficulties and lack of co-ordination of States measures presents a problem. Their importance as alternative measures to excise duties in spheres which are not affected by the latter is not recognised. Octroi duties are levied on purely revenue considerations."

Dr. Lakdawala is for higher import duties. He remarks that while high rates of excise duties on items like petroleum products, tobacco and tobacco products may be justified from the point of view of maintaining supply-demand equilibrium, the high rates in respect of items like kerosene, matches and even sugar are inequitable. Prof. Lakdawala is not in favour of the introduction of value-added taxation as a measure of rationalising the excise duty structure because instead of achieving the desired results, it would complicate the present single-point excise duty in the country and would bring almost the same money revenue. He advocates taxation of services by arguing "From the point of view making the tax system more productive and less inequitous, it would be desirable to extend tax system to organised business services such as automobile repairs, radio and electrical appliance repair services, laundries, hair dressing saloons . . . and also the personal services like those of doctors, lawyers and so on."

In his famous *Justice in Taxation in India*, Dr. Lakdawala categorically states: "The undistributed profits that India levies is, to our mind, hardly justifiable, and must be done away with". Regarding land taxation he writes, "what is needed, however, is an entire overhauling of the system on modern lines with an income tax on agricultural incomes, and a flat low rate on land holders. This is no where yet in sight."

It was the brilliant book *Union-State Financial Relations* that attracted the Government's attention and brought in the honour of his being made a member of the Fifth Finance Commission. This work clearly brought out the problems of financial relationship emanating from the co-existence of an *ad hoc* Finance Commission and a permanent Planning Commission, the combined function of which tend to influence budgetary balance of state governments. In this book he also suggested about establishing a permanent Finance Commission. He feels that these two institutions cannot have a divided and often conflicting 'responsibility in the matter of financial support of state governments. In order to ensure a sort of unity of approach, he suggested that a member of the Planning Commission might sit on the Finance Commission. In the same context he suggests that the awards of the Finance Commission should be made every two years instead of five years so that interval between the two reviews was not unduly long and that plan assistance given in the form of loans should be given strictly in a business-like manner and be routed through an organisation to be called a Development Bank.

As Deputy Chairman of the Planning Commission, he introduced rolling plan (old sixth Five-Year Plan).

Compiler

LAND (*Theory of value)

All types of natural resources.

F. Benham

All natural resources used in the process of production. These include the powers of the soil that are used for agriculture and forestry; mineral resources; water power and the use of the surface water for navigation; the fish and the minerals of the sea; and finally use of the land for sites or locations of productive enterprises.

A.L. Meyers

A factor of production.

A.K. Cairncross

The original and inalienable powers of the soil.

David Ricardo

By land is meant the materials and forces which nature gives freely for a man's aid in land and water, in air, and light and heat.

Alfred Marshall

All the untouched and primal dispositions of nature, the rocks she has laid down the lakes, rivers and seas, she has provided and the climates which she has endowed the various regions. Land that is to say, is what was there before man came and exists and continues independently of his activities.

G.L.S. Shackle

All free gifts of nature, which yield income.

Alfred Marshall

It represents those natural resources which are useful and scarce actually or potentially.

L.M. Fraser

LAND-HOLDING (*Agricultural economics)

The area of land cultivated by a person or a family.

A.B. Das and M.N. Chatterji

LAND-INTENSIVE GOODS (*Economics of development)

Goods which require for their production greater quantity of land as compared to labour and capital.

Compiler

LAND-LORD (*Agricultural economics)

A person or agency that controls the use of land (products of nature) and collects from this use an income called "rent."

G.W. Forster and M.C. Leager

LAND TENANCY (*Agricultural economics)

The system under which land is actually cultivated and the product divided between the owner and cultivator.

A.B. Das and M.N. Chatterji

LAND TENURE (*Agricultural economics)

The legal or customary system under which land is owned.

A.B. Das and M.N. Chatterji

LAND'S MARGINAL PRODUCT (*Agricultural economics)

The Change in total product resulting from one additional unit of land with all other inputs held constant.

Paul A. Samuelson

LANGE, OSCAR (1904–65) (*History of economic thought)

Professor Oscar Lange of Poland is one of economic prodigies of the contemporary world and an author of 114 scientific works.

After spending a sojourn in the United States from 1934 to 1944 as a distinguished professor of both Marxian and non-Marxian economics, returned to his native Poland to become Ambassador to the United Nations and subsequently to serve as Vice-President of the Council of State of Poland and a Professor.

Lange, the Chairman of the Polish-Indian Friendship Society and a personal friend of Jawaharlal Nehru, worked with the Indian Planners in 1956 for six months in the drafting of the second Five-Year Plan. He had come to India in 1955 as an economic adviser on the invitation of Mr. Nehru. In 1959 he was invited by then Prime Minister of Ceylon (now Sri Lanka) Mrs. Bhandarnaike to help work out the economic plans of that country. A few years later, he became adviser to the Planning Commissions of Egypt and Indonesia.

He also served as the Director of the Chair of Political Economy at Warshaw University; Vice-President of the Polish Economic Society; Chairman of the Committee on Economic Science of the Academy of Sciences; and a member of the Institute of Mathematics and of the Social Science Department of the Polish Academy of Sciences.

Lange, a versatile genius wrote on a myriad of subjects like planning, socialism, utility theory, welfare economics, Marxian economics, Walrasian general equilibrium theory and so on. In each department he was brilliant particularly in that of Socialist Planning.

In 1920, Ludwig Von Mises of Austria initiated a pioneering and great controversy by arguing that planning was inconceivable both in principle and practice. Hayek and Robbins joined hands with Mises by supporting the latter's contention that planned economy could never work rationally. Oscar Lange, a ruthless socialist reacted for the first time in 1936 in "on the economic theory of socialism", to Mises's thesis, thereby providing a starting point for modern discussions of economic planning. He maintained that once it was recognized that a price was not merely a rate of exchange, but also an index of scarcity, the concept of planned economy could no longer be rejected in principle. Along with Fred Taylor of Michigan (U.S.A.) and A.P. Lerner of England, Lange answered Mises that socialism could conceptually solve the problems of economic organization by a decentralised process of bureaucratic trial and error-playing the game of competition and deliberately planning not to plan.

Marxian Lange wrote: "The fact that people, who don't deserve to own the tools of production which work with labour and which are given their positive marginal-products out of the total product that might otherwise go to labour, receive a substantial fraction of the GNP, is ethically bad. The cure is to see that labour owns the tools of production and nature's gifts of land and other natural resources. Then labour either in the form of wages or in the form of its share of property income, will indeed get all of the national product. Anything else is exploitation even in a prosperous capitalistic system where wages are very high (and much

higher than are total incomes in egalitarian socialist societies)."

Though basically a Marxist, Lange is quite aware of apparent superiority of Marxian economics. In his brilliant "Marxian Economics and Modern Economics" Published in *Review of Economic Studies*, June 1935, he once again started the debate between modern baurgeois (i.e. traditional capitalistic) economics and Marxian (i.e. proletarian) economics. He wrote, "Clearly the relative merits of Marxian economics and modern bourgeois economic theory belong to different ranges. There are some problems before which Marxian economics is quite powerless, while bourgeois economics solves them easily. What can Marxian economics say about monopoly price? What has it to say on the fundamental problems of monetary and credit theory ? What apparatus has it to offer for analysing the incidence of a tax, or the effect of a certain technical innovation on wages? And (irony of Fate !) what can Marxian economics contribute to the problem of the optimum distribution of productive resources in a socialist economy ?"

Lange like Marshall is a great compromiser too. Hearken to him when he says, "If people want to anticipate the development of capitalism over a long period, a knowledge of Marx is a much more effective starting point than a knowledge of Wieser, Bohm-Bawerk, Pareto, or even Marshall. But Marxian economics would be a poor basis for running a central bank or anticipating the effects of a change in the rate of discount." Lange's argument was that the superiority of Marxian economics in analyzing the capitalist evolution was due not to the labour theory of value, but to the exact specification of the institutional framework of capitalism.

Professor Lange distinguished between the gestation period and operation period of innovation, while analyzing the marginal productivity theory of distribution.

We have Lange-Lerner version of market socialism. It is considered to be the only theory of socialism that has yet been forthcoming. According to it, price must equal marginal cost under decentralized market socialism.

Lange the father of modern socialism, and decentralized socialist planning wrote many books, besides a large number of authoritative articles. His major works include:

1. *Notes on Input-output Analysis.*
2. *Introduction to Econometrics.*
3. *Political Economy* (in three volumes).

The first was translated into French, Japanese and Spanish. The last mentioned book is his main work. It embraces the principal problems of economics such as the theory of reproduction, accumulation, commodity production, the law of value, comparative economic analysis of different social formations etc.

Lange, a great mathematical economist and econometrician, delivered many lectures in various countries. Most of which were on the application of higher mathematics to planning and management of socialist economy.

Along with Hicks, Kaldor, Little, Hotelling, Bergson, Samuelson, Arrow, Debreu and Maurice Allais, Lange was a principal architect of the new welfare economics.

Compiler

LARGE SCALE INDUSTRY (*Industrial economics)

An industry which employs more than Rs. 2.5 crores.

P.C. Jain

An industry which enjoys internal and external economies.

Compiler

LARGE-SCALE PRODUCTION (*Industrial economics)

The production of goods on a large scale, i.e. in large quantities. Large-scale production and mass production though often interchangeably used, are different in one respect. The former does not refer specifically to the manner of production, and considerable variety or individuality of products may exist. The latter, however, means the making of standardised products and the reduction of variety to the minimum.

P.A.S. Taylor

LASPEYRES' INDEX NUMBER (*Statistics)

One of the different index number formulae with systematic weights. [The others are: (i) Paasche's index number, (ii) Fisher's ideal index number, and (iii) Marshall-Edgeworth index number].

Laspeyres' index number is a weighted aggregate price index number and uses base year quantities as weights. This type of index number is likely to have an upward bias and may be said to give an upper limit to the price change. Laspeyres' index number may be written:

$$L = \frac{\Sigma P_1 q_0}{\Sigma P_0 q_0} \times 100$$

Laspeyres' formula uses base year weights.

G.S. Monga

This index number is named after Etienne Laspeyres. He published the formula $\frac{\Sigma P_1 q_0}{\Sigma P_0 q_0}$ (Prices weighed by quantities in the base year). It secured him immortality. A student can no more go through any complete training in economics without hearing of Laspeyres than he can without hearing of A. Smith. This formula of all displayed the most indestructible vitality.

Joseph A. Schumpeter

LATERAL INTEGRATION (*Industrial economics)

It denotes the branching out of a business into various sidelines by absorbing other firms whose products are more or less loosely associated with the main activity of the parent company. It can also be called complex integration.

Raymond Bye

Lateral or allied integration refers to the combination of different industrial units which supply goods and services to help in the functioning of one major common undertaking.

S.C. Kuchhal

LAUDERDALE, JAMES MAITLAND (1759-1830) (*History of economic thought)

A Scottish economist Lord J.M. Lauderdale, the eighth Earl of Lauderdale criticised Mercantilists, Physiocrats and Smith for their erroneous conceptions of technical terms, which led to erroneous conclusions. He distinguished between economic value and economic welfare. He held the view that value could be expressed only by comparing two commodities. While criticising Smith's distinction between productive and unproductive labour, Lauderdale maintained that the criterion should be not the nature of labour but the use of the commodity.

To him continued savings meant under-consumption which was dangerous to the progress of the country. He emphasised the role of capital, advocated the proper distribution of wealth and held that inventions were the chief source of wealth.

His main work is *An Enquiry into the Nature and Origin of Public Wealth and the Means and the Causes of Its Increase* (1804).

Compiler

LAW (*General economics)

A general proposition or statement of tendencies more or less certain more or less definite.

Alfred Marshall

LAW, JOHN (1671-1729) (*History of economic thought)

A famous English Mercantilist. He has been claimed as the founder of a subjective theory of value with a special reference to the value of money. He is perhaps the best exponent of the doctrine that "money stimulates trade".

In his *Money and Trade: Considered With a Proposal for Supplying the Nation with Money*, Law argued, "an addition to the money will employ the people that are now idle"—an apparent contradiction to the Quantity theory that impliedly suggests: squeeze money supply.

He suggested the issue of paper money and the establishment of a

bank of issue in Scotland. The French Government permitted him to open up such a bank in France, which resulting in inflation ruined him.

Compiler

LAW OF COMPARATIVE ADVANTAGES (*International economics)

David Ricardo, stock-broker, and self-made millionaire, expert on the theory of land rent and of currency came up in 1817 with the beautiful proof that international specialisation pays for a nation. This is his famous theory of comparative advantage or as it is sometimes called "the theory of comparative cost".

It states that whether or not one of the two regions is absolutely more efficient in the production of every good than is the other, if each specialises in the products in which it has a comparative advantage (greatest relative efficiency) trade will be mutually profitable to both regions.

Paul A. Samuelson

A nation tends to export those goods which it can produce at relatively low costs, and to import those goods in which its costs of production are relatively high.

(See also *Comparative Cost Theory*).

Raymond Bye

LAW OF CONSTANT RETURNS (*Theory of value)

The law may be stated thus: When all the productive services are increased in a given proportion, the product is increased in the same proportion.

An industry is said to be under the law of constant returns when the cost per unit remains unaltered or increased investment of labour and capital results in a proportionate increase in the output.

K.K. Dewett

LAW OF DEMAND (*Theory of value)

The law states that at any given time, the demand for a commodity or service at the prevailing price is greater than it would be at a higher price and less than it would at a lower price.

S.E. Thomas

Subject to absence of change in income or of spontaneous change in tastes, stability of prices of rival and complementary things and absence of anticipation of further change of price in the same direction, the lower the price of a thing, the more of it will be bought.

Sir Dennis H. Robertson

In general, the quantity of any good which people are ready to buy varies inversely with the price of that good.

Fairchild, Buck and Slesinger

In almost practically important cases, lower price will be associated with larger quantities bought per time-unit and *vice-versa*, provided that all the other governing and influential circumstances, except the price of the good in question, remains unchanged.

G.L.S. Shackle

The greater the amount to be sold, the smaller must be the price at which it is offered in order that it may find purchasers; or in other words, the amount demanded increases with a fall in price and diminishes with a rise in price.

Alfred Marshall

Other things beings equal, the amount of a commodity which will be bought, tends to vary inversely with its price.

Anatol Murad

The inverse relationship between price and quantity—the lower the price, the larger is the quantity that is bought; and the higher the price, the smaller the quantity—is often called the law of demand.

D.S. Watson

LAW OF DEMAND AND SUPPLY (*Theory of value)

The famous of all economic laws. It states that the price of an economic good tends towards the point where the effective demand for it equals the effective supply.

Raymond Bye

LAW OF DIMINISHING CONSUMPTION (*Theory of value)

The name used by Sir D.H. Robertson to describe the law of demand.

Compiler

LAW OF DIMINISHING MARGINAL-PHYSICAL PRODUCT (*Theory of value)

Paul A. Samuelson's name for the law of diminishing returns.

Compiler

The law of diminishing returns which we call the law of diminishing marginal-physical product may be restated thus: As we hold a fixed input constant and increase a variable input, the marginal-physical product of the variable output will decline—at least after a point.

P.A. Samuelson

LAW OF DIMINISHING MARGINAL UTILITY (*Theory of value)

The additional benefit which a person derives from a given increase of his stock of a thing diminishes with every increase in stock that he already has.

It may also be called the law of satiable wants.

Alfred Marshall

The more we have of a thing, the less we want the additional increments of it or the more we want not to have additional increments of it.

Chapman

It states that if a consumer, with given tastes, increases his consumption of one commodity only, the marginal utility to him of that commodity will fall relatively to the marginal utility of other commodities.

F. Benham

As the amount consumed of a good increases, the marginal utility of the good (or the extra utility added by its last unit) tends to increase.

P.A. Samuelson

The larger the amount of a thing a man has, the less the satisfaction, he derives from any given addition to that amount.

D.H. Robertson

When a person's consumption goes up by equal small steps, his utility will go up by diminishing small steps.

G.L.S. Shackle

The total utility of a thing to anyone (that is the total pleasure or other benefit it yields him) increases with every increase in his stock of it, but not as fast as his stock increases. If his stock of it increases at a uniform rate, the benefit derived from it increases at a diminishing rate.

Alfred Marshall

The more of anything we have (under the condition that the quantities of all other things we have remain the same), the less we want more of it.

Kenneth E. Boulding

After a certain point has been reached, the utility of any unit of one's stock of an economic good diminishes as the stock possessed increases.

Raymond Bye

Other things being equal, the marginal utility of a stock of goods decreases as the quantity of the stock increases.

Anatol Murad

The more you have of anything, the less important to you is any *one* unit of it.

D.S. Watson

William Stanley Jevons (1835-82) might be said to be the proponent of the law, even though its origin could be traced to the writings of H.H. Gossen (1810-58) and Jeremy Bentham (1748-1832).

Also known as the First Law of Gossen after Gossen, it states in the words of Gossen, "The amount of one and the same enjoyment diminishes continuously as we proceed with that enjoyment without interruption until the satiety is reached".

The law of diminishing marginal utility is the most fundamental of all the laws of consumption in that it is the basis of the law of demand and the law of equi-marginal utility. It was this law that resolved the classical diamond-water paradox.

Compiler

LAW OF DIMINISHING PRODUTIVITY (*Theory of value)

Law of diminishing marginal utility.

Compiler

LAW OF DIMINISHING PSYCHIC PRODUCTION (*Theory of value)

Law of (eventually) diminishing marginal utility.

Compiler

It states that successive increments of any commodity (after a certain point) will render services of decreasing significance to the person who consumes or commands them.

Phillip H. Wicksteed

LAW OF DIMINISHING RETURNS (*Theory of value)

It states that as the proportion of one factor in a combination of factors is increased, after a point, first the marginal and then the average product of that factor will diminish.

F. Benham

It refers to the amount of extra output that we get when we successively add equal extra units of a varying input to a fixed amount of some other input.

P.A. Samuelson

An increase in some inputs relative to other fixed inputs, will cause total output to increase; but after a point the extra output resulting from the same additions of extra inputs is likely to become less and less. This falling off of extra returns is a consequence of the fact that the new "doses" of the varying resources have less and less of the fixed resources to work with.

Paul A. Samuelson

An increase in the amount of a variable factor added to a fixed factor, causes, in general, a less than proportionate increase in the amount of product, given technical conditions.

It comes to the same thing as the Law of Diminishing Marginal Product.

A.W. Stonier and D.C. Hague

It is the basic generalisation on the relationship between the rates of inputs of productive services and the rate of output of the product.

The law may be stated as follows.

As equal increments of one input are added the inputs of other productive services being held constant, beyond a certain point, the resulting increments of product will decrease, i.e. the marginal products will diminish.

Thomas Robert Malthus and Edward West proposed this law.

George J. Stigler

The law of diminishing returns may be provisionally worded thus:

An increase in capital and labour applied in the cultivation of land causes in general less than proportionate increase in the amount of produce raised unless it happens to coincide with an improvement in the art of agriculture.

Alfred Marshall

The expansion of an industry provided that additional supplies of some agent in production which is essential cannot be obtained is invariably accompanied at once or eventually by decreasing returns, other things being equal.

Chapman

It may be called the law of eventually diminishing marginal physical productivity since the expression "diminishing returns" is a loose one and is capable of several interpretations.

We may state it thus:

As we increase the quantity of any one input which is combined with a fixed quantity of other inputs, the marginal physical productivity of the variable input must eventually diminish,

K.E. Boulding

When the quantity of certain factors of production is held constant, while the amount of at least one other factor changes, the output added by each additional unit of the variable factor will at first rise, but after a certain level of output is reached, the amount of prouduction added by each additional unit of the variable will begin to decline.

R.M. Havens, J.S. Henderson and D.C. Crammer

When a variable factor (for example fertiliser) is applied to a fixed factor (for example land), the product per acre will increase but at a diminishing rate.

G.W. Forster and M.C. Leager

The law states that in a given state of the arts, the average output obtained from additional inputs of any productive factor (or factors) used with a fixed quantity of other factors will increase up to a certain point beyond which it will decline progressively.

Raymond Bye

The history of the law may be traced to 1815 when West, Torrens, Malthus and Ricardo independently formulated the theory of differential rent which embodied the law diminishing returns.

West put it: "the principle that in the progress of the improvement of cultivation the raising of rude produce becomes progressively more expensive". He explained, "Each equal additional quantity of work bestowed on agriculture, yields an actually of diminished return".

Mark Blaug

LAW OF DIMINISHING UTILITY OF INCOME (*Theory of value)

The greater the flow of goods and services over which a person has command, the smaller the enjoyment he derives from a given addition to that flow.

D.H. Robertson

LAW OF DOWNWARD SLOPING DEMAND (*Theory of value)

Quantity (demanded) and price are inversely related, quantity going up when price goes down. The curve slopes downward, going from north-west to south-east. This important property is given the name: law of downward sloping demand.

P.A Samuelson

LAW OF INCREASE OF STATE ACTIVITY (*Public finance)

A famous law proposed by Adolf Wagner (1835-1917) of Germany.

Compiler

Comprehensive comparisons of different countries and different times show that among progressive peoples with which alone we are concerned

an increase regularly takes place in the activity of both the central and local governments. This increase is both extensive and intensive: the central and local governments constantly undertake new functions, while they perform both old and new functions more efficiently and completely. In this way the economic needs of the people to an increasing extent and in a more satisfactory fashion are satisfied by the central and local governments.

Adolf Wagner

LAW OF INCREASING COST (*Theory of value)

Law of diminishing returns.

Compiler

In the absence of any improvement in knowledge or organisation, the larger the amount of a thing produced, the greater the real cost involved in making any given addition to the production.

Sir D.H. Robertson

LAW OF INCREASING RETURNS (*Theory of value)

When an increased amount of any factor of production is devoted to a certain use, it is often the case that improvement in organisation can be introduced which will make natural units of the factor (men, acres or money capital) more efficient so that an increase in output does not require a proportionate increase in the physical amount of the factor. This law or rather tendency, like the law of Diminishing Returns may apply equally to all the factors of production, but unlike the Law of Diminishing Returns, it does not apply in every case. Sometimes an increase of the factors will lead to improvements in efficiency and sometimes it will not.

Mrs. Joan Robinson

As regards the theory of value, it would mean that an enlargement of total output tends of itself to bring a lowering of costs per unit (and hence under competitive conditions a decline in price).

F.W. Taussig

The expansion of an industry provided that there is no dearth of suitable agents of production, tends to be accompanied, other things being equal, by increasing returns.

Chapman

An increase of labour and capital leads generally to improved organisation, which increases the efficiency of the work of labour and capital. Therefore, in those industries which are not engaged in raising raw produce, an increase of labour and capital generally gives a return increased more than in proportion; and further this improved organisation

tends to diminish or even override any increased resistance which nature may offer to raising increased amounts of raw produce.

Alfred Marshall

LAW OF LAND RENT (*Theory of value)

Ricardo's theory of rent or Classical rent theory.

Compiler

LAW OF NON-PROPORTIONAL OUTPUTS (*Theory of value)

This law is more usually called the law of diminishing returns. This law is stated as: if one or more factors of production are held constant and one or more other factors are allowed to vary in amount, the total output will not vary in continuous to the amount of variable factors employed.

This law might also be stated as follows: If one or more factors of production are held constant and one or more other factors are allowed to vary in amount, the output per unit of variable factor will not continue to remain constant but will increase, reach a maximum and then decrease.

Albert L. Meyers

LAW OF ONE PRICE (*Theory of value)

Where competition is present, the price of a given commodity tends to be the same throughout the whole of a given market, except for differences in transportation costs.

Raymond Bye

LAW OF OVERVALUATION OF PRESENT (*Theory of value)

It is the economist's way of saying that most people regard a bird in hand is worth two in the bush.

D.H. Robertson

LAW OF PROPORTIONALITY (*Theory of value)

Any change which increases the ratio which one productive factor or combination of productive factors bears to those cooperating with it, will tend to lower the average income per unit of the first factor or combination of factors as compared with the others.

Fairchild, Buck and Slesinger

LAW OF REFLUX (*Monetary economics)

The function of banking, we are told by Smith, is to economise upon the stock of precious metals; paper money "never can exceed the value of the gold and silver, of which it supplies the place", because excess paper will go abroad or be presented to banks in payment for gold; this is the Law of Reflux which received a thorough airing in the monetary controversies over the Bank Charter Act of 1844.

Mark Blaug

LAW OF SATIABLE WANTS (*Theory of value)

The name suggested by Alfred Marshall for the law of diminishing marginal utility.

Compiler

LAW OF SCARCITY (*Theory of value)

In a fully employed economy, production of one item can be increased only by a decrease in the production of some other item or items.

Havens, Henderson and Crammer

LAW OF SUBSTITUTION (*Theory of value)

This principle was set forth as an economic law by the great British economist Marshall, late in the 19th century. He called it the law of substitution. It states: Enterprisers seek to reduce their costs to a minimum by substituting cheaper for dearer factors as far as it pays to do so.

Raymond Bye

It is also known as Gossen's second law after H.H. Gossen.

Compiler

In order to obtain maximum sum of enjoyment, an individual who has a choice between a number of enjoyments but insufficient time to procure all completely is obliged—however much the absolute amount of individual enjoyments may differ—to procure all partially even before he has completed the greatest of them. The relation between them must be such that at the moment when they are discontinued the amount of all enjoyments are equal.

H.H. Gossen

LAW OF SUPPLY (*Theory of value)

Also known as the first law of supply it states: under the same conditions of supply, the quantity offered for sale will vary directly with the price. The higher the price, the greater will be the quantity of a good offered for sale.

Albert L. Meyers

Other things being equal, the quantity of a commodity offered in a given market at a given time tends to vary directly with its price.

Anatol Murad

LAW OF SUPPLY AND DEMAND (*Theory of value)

The market price and the quantity sold will be determined by supply and demand in competitive markets.

Many modern economists prefer to state that given demand and supply, price and quantity sold will tend to move toward equilibrium levels that will clear the market.

G.L. Bach

LAW OF SURVIVAL OF THE FITTEST (*General economics)

Those organisms tend to survive which are best fitted to utilise the environment for their own purposes.

Alfred Marshall

LAW OF VARIABLE PROPORTIONS (*Theory of value)

Law of diminishing returns. Nowadays the law is called by its first name and the early economists called it by the second name.

It states that with a given technological conditions there will be a point beyond which the addition of more variable factors to a fixed factor will bring falling returns per unit of variable factor and with constant factor prices will cause average variable costs to rise.

A.W. Stonier and D.C. Hague

The law of variable proportions, also known as the law of diminishing returns can be stated as follows: when total output or production of a commodity is increased by adding units of a variable input while the quantities of other inputs are held constant, the increases in total production become, after some point, smaller and smaller.

D.S. Watson

The law states "with one or more factors fixed (or less easily varied than the others), as units of the variable factor or factors are added (or added at a comparatively faster rate) production will go through successive stages of efficiency—namely, increasing, constant, diminishing, zero and negative returns.

Quoted by Henry Grayson

LAWS OF RETURNS (*Theory of value)

In economics there are three laws of returns: (1) Law of diminishing returns, (2) Law of increasing returns, and (2) Law of constant returns. "There is said to be increasing, decreasing or constant returns according as the marginal returns rise, fall or remain unchanged."

Compiler

LAY-OFF NOTICE COMPENSATION (*Economics of labour)

An arrangement under which the employer undertakes to notify his employees, a specified period in advance, of impending lay-off and to provide them with employment or wages during the notified period.

V.V. Giri

LEADS AND LAGS (*International economics)

Timing of payments or of covering arrangements connected with foreign trade transactions, adjusted for the purpose of avoiding losses.

A term often employed loosely with regard to foreign trade to embrace all those temporary and abnormal influences affecting the balance of payments, but not easily isolated and measured. The terms lags and lead show a deviation from normal at a time at which settlement is made in the course of international trade.

Compiler

LEADERS AND FOLLOWERS (*Theory of value)

In the Cournot model of oligopoly (named after Augustine Cournot) each seller passively adjusts his output to that of his opponent. Each follows the other.

In contrast, in the Bertrand and Edgeworth models (named after Joseph Bertrand and F.Y. Edgewerth) each of the sellers tries to seize all or part of the market for himself. Each wants to dominate, to be the leader.

Compiler

LEAKAGE (*Keynesian economics)

The income which is not spent on consumption. The process of capital formation or income propagation peters out because of leakages. The leakage takes several forms such as:

(i) saving, (ii) debt cancellation, (iii) accumulation of idle cash deposits, (iv) purchase of old stocks and securities, (v) imports, (vi) price inflation, (vii) taxes and corporate savings etc..

Because of these leakages, the Keynesian investment multiplier receives a set-back in the tempo of its operation.

Compiler

LEGAL MONOPOLY (*Industrial economics)

The services that public utilities provide are usually called legal monopolies since competition in producing them would be so wasteful and inefficient that it is considered advisable to grant the exclusive right to perform such services to one company. (Public utilities are firms in industries, such as street-car lines, gas and electric companies, water companies, railroads, telephone and telegraph companies and so on.)

Albert L. Meyers

LEGAL RESERVES (*Monetary economics)

The amount of assets in whatever form that a bank is required to hold by law.

W.W. Haines

LEGAL TENDER (*Monetary economics)

Money of any kind, if the offer of it, in the exact sum, in settlement of a debt leaves the creditor no option but to discharge the debt.

R.S. Sayers

'Legal' means by law and 'tender' means to give. Any currency (metallic or paper) which a debtor may give in settlement of dues owing to him or any kind of money which according to law, must be accepted when offered in payment of obligations, expressed in terms of the country's monetary unit.

Rajnarain Mathur

Money that the law says *must* be accepted at face value in payment of debt.

OR

Any money that must by law be accepted in satisfaction of a debt.

W.W. Haines

And kind of money which according to law must be accepted when offered in payment of any obligation, expressed in terms of the country's monetary unit.

Fairchild, Buck and Slesinger

Any kind of money that a government has officially designated as an adequate instrument for the discharge of obligations stated to be payable in domestic money.

Raymond P. Kent

LEGISLATIVE BUDGET (*Public finance)

Budget prepared by or for a committee of the legislative branch for adoption by that branch.

Philip E. Taylor

LENDER OF LAST RESORT (*Monetary economics)

When the commercial banks and other finance houses want to borrow short-term loans and cannot borrow enough from one another the money market as a whole being short of cash, they come in the last resort to the central bank. So central bank is called the lender of the last resort.

F. Benham

The expression "lender of the last resort" was coined by Walter Bagehot (1826-77), a famous English financial expert in his masterpiece, *Lobard Street* (1873).

This function refers to the central bank's assumption of the responsibility of meeting, directly or indirectly, all reasonable demands for accommodation from commercial banks, discount houses and other credit institutions, in times of crisis and panic.

Compiler

LENIN, VLADIMIR ILYICH ULYANOV (1870-1924) (*History of economic thought)

The father of economic planning. It is argued that it is Lenin and not Marx who developed the theory of imperialism.

Born in April 1870 at Simbirsk (now Ulyanovsk), Lenin joined the Marxist Emancipation of Labour group. While in exile, he married Krupskaya.

Lenin, a genious theoretician regarded Karl Marx and Friederich Engels as twin stars. His philosophy was based on Marxism and the system developed by him is known as Leninism which Joseph Stalin defined as "Marxism of the era of imperialism and of the proletarian revolution. To be more exact, Leninism is the theory and tactics of the proletarian revolution in general the theory and tactics of the dictatorship of the proletariat in particular."

He wrote many books. Besides, his collected works run into thirty big volumes. These include: *What is be Done? Leftwing Communism*; *The Tasks of the Proletariat in our Revolution*; *Imperialism*; *The Highest Stage of Capitalism*; *War and the Workers*; *Socialism and War*; *Opportunism and Social Chauvinism*; *The War and the Second International*; *State and Revolution*; *Two Tactics*; *Will the Bolshevicks Maintain Power? The Threatening Catastrophe* etc.

Lenin attacked legal Marxists such as Tugan Baranovsky, Struve and Bulgakov and bitterly criticised Economism (i.e. French Syndicalism) which degraded the historical role of the proletariat. He emphasized the role of trade unions and opposed opportunism and social chauvinism.

He was not very much interested in Marx's labour theory of value. Instead, he was more interested in the revolutionary side of Marxism.

Compiler

LEONTIEF, WASSILY (b. 1906) (*History of economic thought)

The Russian-born American winner of the 1973 Nobel Prize in economics for his creation of input-output theory which has revolutionized economic research and national planning all over the world. In the citation the Royal Swedish Academy of Sciences described Leontief as "the sole and unchallenged, creator of the input-output theory". The citation added, "This important innovation has given an empirically useful method to highlight the general interdependence in the production system of a society."

Wassily Leontief of Harvard University (U.S.A.) was born on August 5, 1906 in St. Petersburg (now Leningrad), (U.S.S.R.). He is the only child of Wassily W. Leontief, a professor, and the former Eugenia Bekker. Closely supervised in his studies by his father, Leontief early displayed a keen interest in science and research. In 1921, he graduated from the local *Gymnasium* and entered the University of Leningrad, where he received the "Learned Economist" degree four years later.

The bouncy Russian emigre who has been described as "a scholar of small physical but enormous intellectual stature who gets as much excitement from snaring a big river trout as from leading a seminar in advanced economic theory" went to Germany in 1925 to matriculate at the University of Berlin where he received his Ph.D. degree in 1928. His doctoral dissertation contained some of the seeds of future input-output technique. While writing it, he worked as a research associate in the Institute fur Weltwirtchaft (Institute of World Economics) and he returned to the Institute after visiting China (Nanking) for a year in 1928-29 as economic consultant to the Government of China.

In 1931, Dr. Leontief immigrated to the United States and he worked there first as a research associate with the National Bureau of Economic Research in New York. Harvard University agreed to help Leontief to develop his input-output system, and he joined the Department of Economics of this University before the end of 1931. Since then he has remained there rising from instructor to assistant professor (1933) to associate professor (1939) and finally to Henry Lee Professor of Economics (1946). He has also been the Director of the Harvard Economic Research Project on the structure of the American Economy since 1948.

Leontief joined Harvard University on the condition that the university should assist him in developing the analysis he had conceived. The Harvard Committee on Research in the Social Sciences provided him with a research assistant and an initial grant of $ 2000. Leontief began work on his first input-output table covering 42 American industries. It took him months to complete and digest figures that computers would later handle. He spent a decade on the project.

In 1941 the U.S. Government asked him to analyze 96 industries for a mammoth study of the effect of that wartime mobilization would probably have on the economy. Working as a consultant to the Department of Labour, he supervised the construction of an input-output table covering 95 industries and sectors, based on the census figures of 1939. Referring to the input-output tool, Prof. P.A. Samuelson—a former student of Leontief—writes, "Leontief breaks the economy down industry by industry. The underlying idea is very simple. How much coal is there per unit of iron? How much iron per unit of coal?"

The Current Biography (1967) summarises the input-output analysis as under: "The basis of Leontief's complex system is a grid-like table, similar to the mileage chart on a road map showing what individual

industries buy from and sell to each other. With the inclusion of such sectors as government, consumers and foreign countries, it gives an overall picture of the circulation of goods and services in a national economy. Down the leftside of the table, each heading a horizontal row of the grid, are listed the key industries and sectors. The same names are repeated across the top of the table where each heads a vertical column. The figures in the squares of the grid simultaneously represent either input (purchase) or output (sales) depending upon whether they are read vertically or horizontally. To the industry at the top of the column, a figure is input; to the industry at the left of the row, it is output using equations and inverse coefficients, and aided by computers. Leontief and his associates can calculate with some precision how future changes in, for example, technology, taxes or the production of steel will affect the economy as a whole or any of its parts. This system of input-output analysis has been adopted by a number of governments to help them to anticipate and prepare for economic challenges or to check an ordinary governmental statistics.

Leontief set up the Harvard Economic project on the structure of the American Economy in 1948. He played a key role at an international conference of economists held in Keil, West Germany, in March 1951 to consider the economic implications of disarmament. He held that expenditure on armaments was neither necessary nor an effective instrument for securing full employment and that the economic difficulties involved in disarmament would be only transitional.

From 1961 to 1965, Leontief was a part-time general consultant to the U.S. Department of Labour and in 1966 he became a part-time consultant to the Department of Commerce. He held Guggenheim fellowship in 1940 and 1950. He has been the Chairman of the Society of Fellows at Harvard since 1964. He has been a member of the Economertic Society, the American Philosophical Society the American Academy of Arts and Sciences, the International Statistical Institute, the American Economic Association and the Royal Economic Society.

Leontief was awarded the order of the Cherubim of the University of Pisa in 1953 and an honorary Doctorate from the faculty of Brussels (1962).

Besides the input-output analysis, Dr. Leontief is the author of controversial "Leontief Paradox." (See the next entry).

Leontief's publications include:

1. *The Structure of the American Economy, 1919-29: An Empirical Application of Equilibrium Analysis* (1941).
2. *The Structure of American Economy 1919-39* (1951).
3. *Input-output Economics* (1966).
4. *Studies in the Structure of the American Economy* (1953).
5. *Theories and Theorising* (1966).

Five feet seven inches tall Burly Wassily Leontief married Estella Helena Marks on December 25, 1932. They have a daughter Svetlana Eugenia (Mrs. Paul Alpers) who teaches at the University of California.

Compiler

LEONTIEF PARADOX (*International economics)

Heckscher-Ohlin theory of international trade stated, "a country exports those commodities which use intensively that factor of production with which the country is relatively abundantly endowed." According to this theory, the U.S.A. is a capital-abundant and labour-short economy. But Wassily Leontief, the 1973 Nobel Laureate, in his "Domestic Production and Foreign Trade" (1953) came to a staggering conclusion that the U.S.A. was a country lacking in capital. He concluded that America participated in international trade in order to dispose of her surplus labour and economise her scarce capital. This is called Leontief paradox which is the by-product of input-output analysis.

Compiler

Leontief's statement that the most capital rich of all countries, the United States exports labour-intensive goods.

Bo Sodersten

LERNER, ABBA PTACHYA (1903) (*History of economic thought)

An internationally renowned Soviet-born British economist.

Born in Bessarabia, Russia, A.P. Lerner studied and taught in England and moved to the United States in 1940. As Leon Fellow of the University of London he spent time in Cambridge in 1934-35. He was a cap machinist and a Hebrew teacher. He taught at Columbia University, Roosevelt University, the New School for Social Research, John Hopkins and Hebrew University in Jerusalem. He also served as Professor of Economics at Michigan State University. Winner of many awards, he was consultant to the Rand Corporation and an adviser to the Israeli government. Author of many technical articles, Lerner has written a number of influential books which include *The Economics of Control (1944)*, *Economics of Employment (1951)* and *Essays in Economic Analysis (1953)*.

Lerner advanced an ingenious defence of egalitarianism based on the law of diminishing marginal utility of income without assuming that "all men are equal" in the capacity to enjoy income. He showed that every move towards a more equal distribution of income was likely to increase total welfare. He defended the practical importance of the notion of Hicksian four consumer's surpluses in welfare economics. In the field of welfare economics the entire inventory of optimum conditions appeared for the first time in professor Lerner's articles on socialist

economics in the mid 1930's (which later culminated in two classic *articles* by A. Bergson and J.R. Hicks in 1938 and 1939.) He is one of the principal founders of the new welfare economics.

There is what is known as Hotelling-Lerner proposition that marginal cost pricing in all indusries would require subsidies to any industry operating with a falling supply price. Through an ingenious diagram, Lerner nicely brought out the distinction betwen the marginal efficiency of capital and the marginal efficiency of investment. He graphically treated the loanable funds theory of interest.

Lerner theorized the practice of deficit financing; called secular stagnation "economic maturity": made the leading contribution to Daltonian problem of "arc elasticity"; measured the degree of monopoly by the formula $\frac{P-C}{P}$ P where and C represent price or average revenue and marginal cost respectively; distinguished between aggressive and productive speculation (productive speculation was called "constructive speculation" and "mercantile speculation" by A. Marshall and F.W. Taussig respectively); suggested that full employment was reached when inflation began; argued that "total satisfaction is maximized by that division of income which equalizes the marginal utilities of the incomes of all individuals in the society"; in 1934 Sharply asked Maurice Dobb as to how could the productivities of different industries be compared in the absence of a price system, how could the productivity of investment be estimated and how much freedom could the consumer be allowed; along with Fred Taylor and Oscar Lange, encountered Ludwig Von Mises around 1920 with the view that socialism could solve the problems of economic organisation by a decentralised process of bureaucratic trial and error—"Playing the game of competition" and "deliberately planning not to plan". However, according to J.A. Schumpeter, Lerner was a scientifically trained socialist and not a Marxist.

Then there is what is known as Marshall-Lerner criterion. It is a rule which states that the elasticity conditions under which a change in a country's exchange rate would improve its balance of trade.

Adverting to micro-economics, Lerner observes, "Micro-economics consists of looking at the economy through a microscope, as it were, to see how the millions of cells in the body economic—the individuals or households as consumers and the individuals or firms as producers—play their part in the working of the whole economic organism." and maintains that "Actually micro-economics is much more intimately concerned with the economy as a whole than is macro-economics, and can even be said to examine the whole economy microscopically."

Compiler

LESS DEVELOPED COUNTRIES (*Economics of development)

Popularly called LDCs, the term refers to poor countries.

Compiler

The expressions consistently used by professor Harry G. Johnson and Dr. John Pincus.

The expressions—materially primitive, backward, poor, under-developed, developing and less developed, are interchangeably used. The last three expressions are clearly euphemisms, induced in part by political considerations but mainly by the emergence and extension of feelings of guilt in industrialised western society.

P.T. Bauer

Writers used to speak of "bacward" nations, which naturally irritated the people of those lands. To avoid offence, the United Nations sometimes uses the roundabout expression "developing" nations. Today most people adopt the expression 'less developed countries (LDCs)'. Alternative definitions are given. Most seem to involve the following;

A less developed country is simply one with real per capita income that is low relative to the present-day per capita incomes of such nations as Canada, the United States, Great Britain and Western Europe generally. Optimistically, a less developed country is one regarded as being capable of substatial improvement in its income level.

The African, Asian (excluding Japan) countries and Albania in Europe fall in the less developed category.

P.A. Samuelson

LESS RIGID VERSION OF THE QUANTITY THEORY (*Monetary economics)

Also called unrigorous version of the quantity theory, it states that if the amount of money (M) increases, prices will increase; and if M decreases, prices will fall. But there is no attempt to say by how much prices will alter as M alters.

A.W. Stonier and D.C. Hague

LESS THAN FULL EMPLOYMENT (*Keynesian economics)

The phrase introduced by Lord Keynes while repudiating the Classical assumption of full employment, relates to underemployment. While many economists call it a significant contribution of Lord Keynes, Keynes's severest critic W. Hazlitt calls it "pure nonsense."

Compiler

LESS THAN UNITY ELASTICITY (*Theory of value)

If the total amount spent decreases with a decrease in price or increases with a rise in price, elasticity of demand is less than unity. The demand is inelastic.

A.L. Meyers

LETTER OF CREDIT (*Monetary economics)

A letter from a bank promising (on behalf of the importer) to pay for merchandise provided the exporter fulfills certain specified conditions.

W.W. Haines

A document issued by a banker authorising the banker to whom it is addressed to honour the cheques of the person named in the document, to the extent of a certain sum stated in the letter and to charge the sums to the account of the granter.

A.K. Basu

LEVEL OF LIVING (*General economics)

The nature of the satisfactions that the individual is actually enjoying at a given time.

Fairchild, Buck and Slesinger

LEVERAGE (*Business cycles)

Interaction of multiplier and acceleration. The combination of the two effects that sets off upward spiral is sometimes called leverage.

To explain: An increment in investment from whatever source injects new money in the circuit flow. This will generate an expansion of income several times greater than itself through the multiplier effect. The increase in income in turn will raise the demand for consumption goods because of increasing propensity to consume. Increased demand for consumption goods induces more investment by a magnified amount in accordance with the accelerator. So there is now a fresh increment in investment to set the same sequence of expansion going a second time and so on in an everascending series.

Compiler

LEWIS, WILLIAM ARTHUR (b. 1915) (*History of economic thought)

The winner of 1979 Nobel Prize in economics. Sir (William) Arthur Lewis was awarded jointly with Theodore W. Schultze of the U.S A. the 800,000 Kronor ($ 19,000) worth Nobel prize for pioneering the work on economic development research with particular consideration of the problems of developing countries.

Lewis, Kt. B. Com., Ph.D., LL.D., was born on Saturday 23rd January 1915, at St. Lucia, *the West Indies*, of George Ferdinand and Ida Louisa in the black community. After receiving his education in the London School of Economics he worked there as lecturer in economics from 1933 to 1948. In 1947, he married Gladys Jacobs. The next year he was appointed professor of political economy at Manchester University. He held the post till 1958.

In 1959, after being recognized all over the world as a leading

development economist, Dr. Lewis returned to his motherland—the West Indies to become the principal of a college. Soon he became the Vice-Chancellor of the University of the West Indies. He remained in that position till 1963 when he with his wife and their two daughters migrated to the U.S.A. to become professor of political economy at Princeton University. He has settled there.

Professor Lewis was the first President of the Caribbean Development Bank from 1970 to 1973. He is a member of the American Philosophical Society and the American Academy of Arts and Sciences and a Distinguished Fellow of the American Economic Association. Music is Lewis's hobby.

Professor Lewis is one of the economists who have been able to exert tremendous influence on the UNO, the IBRD and the UNCTAD, in policy matters relating to development. He could achieve this rate eminence through his publications which include:

(i) *Economic Survey, 1918-39* (1949)
(ii) *Overhead Costs* (1949)
(iii) *The Theory of Economic Growth* (1955)
(iv) *Development Planning* (1966)
(v) *The Principles of Economic Planning* (1951)

Among these *The Theory of Economic Growth* is his masterpiecce which brought him the Nobel prize. Besides the above publications, Lewis has published a number of brilliant articles and papers.

Prof. Lewis observes that deficit financing may at best be employed only for productive investments which can quickly increase production to absorb increased purchasing power.

Distinguishing between comprehensive planning and partial planning he defines the latter as "piece-meal planning which may be required in those sectors of the economy where the demand and supply forces are out of equilibrium." The credit of enunciating planning in a capitalist civilization goes, among others, to professor Lewis. He remarks, "Popular enthusiasm is both the lubricating oil of planning and the petrol of economic development, a dynamic force that makes all things possible." He notes, "planning is at the same time much more necessary and much more difficult in backward than advanced countries. Lewis warns, "In the ridiculous of the underdeveloped countries, the leaders go on for flashy uniforms, places, toy armies, television, innumerable embassies, military parades and other symbols of splendour. In the more sensible of the underdeveloped countries the weakness for prestige shows itself in lavish expenditure on airports, model towns and imposing public buildings. I would give high marks to a development programme in which only 10 per cent of the expenditure was in nonsense of this kind."

To Lewis, the terms 'economic development' and 'growth' are synonymous. According to him, the three requirements of growth are the effort to economise, application of increased knowledge to production and increasing per capita resources.

Alluding to savings, Lewis observes, "No nation is so poor that it could not save 12 per cent of its national income if it wanted to: poverty has never prevented the nations from launching upon wars or from wasting their substance from other ways. Least of all can those nations plead poverty as an excuse for not saving in which 40 per cent or so of the national income is squandered by the top 10 per cent of the income receivers lviing luxuriously on rent."

Emphasizing the role of the Government *vis-a-vis* planning, prof. Lewis writes, "The behaviour of Government plays an important role in stimulating or discouraging economic activity. No country has made progress without stimulus from intellectual governments. "He continues that development planning "requires a strong, competent and incorrupt administration which is just what no backward country possesses." He recommends that in the absence of such an administration, it is often much better that Governments should be *laissez-faire* than that they should pretend to plan. In his opinion the secret of successful planning lies more in sensible politics and good public administration.

Professor Lewis in 1954 propounded a theory of economic development. It is called the theory of unlimited supplies of labour. It may be summarised as follows: "In an underdeveloped country there is an unlimited supply of labour available at subsistence wages. The unlimited supply of labour is provided by the farmers, the casuals, the petty traders, women in the households etc. and population growth. When this surplus labour is diverted from 'subsistence sector' to 'capitalistic sector', capital formation takes place which in turn generates economic development. The capitalist sector is that part of the economy which uses reproducible capital and pays capitalists for the use thereof. The capitalist sector needs skilled labour and this can be provided by training the unskilled labour in the subsistence sector.

The correct explanation why poor countries save so little, avers Lewis, is not because they are poor but because their capitalistic sectors are so small. While developing his theory, he recognized that employment of unemployed surplus labour would cause a rise in prices. This will also increase imports.

Lewis maintains that "high taxes on profits will destroy development if the proceeds of the taxes are spent by the State on current purposes instead of being saved and invested productively and if the managerial classes are not rewarded both financially and socially. He argues that "inflation for the purpose of capital formation is in due course, self-destructive".

Compiler

LIABILITIES OF A BANK (*Monetary economics)

The sources of its funds which are employed by a bank in the ordinary course of business.

A.K. Basu

LIABILITY OF A PERSON (*Monetary economics)

Any debt owed to another.

W.W. Haines

Property rights of others against him or his wealth.

Fairchild, Buck and Slesinger

LIBERALISM (*Economics of development)

The philosophy which advocates the largest possible use of the forces of competition as a means of co-ordinating human efforts and achieving economic ends and thus rejects any type of interference in economic life.

Arthur Seldon and F.G. Pennance

LIEN (*Monetary economics)

Right to retain goods.

A.K. Basu

LIMITED COINAGE (*Monetary economics)

A system where coinage is done on Government account only.

Rajnarain Mathur

LIMITED GOLD BULLION STANDARD (*Monetary economics)

Under full gold bullion standard the monetary authorities sold the large gold bars for all purposes. People would buy gold for hoarding or for export hoping to reap a speculative gain. This permitted underived drainage of gold from government and central bank reserves and tended to force decreases in the money supply and in the availability of credit. To escape these results, the monetary authorities placed limitations upon the purposes for which gold would be sold and even went so far as to forbid anyone to buy or hold gold for any but legitimate purposes and that is limited gold bullion standard.

L.V. Chandler

LIMITED LIABILITY (*Industrial economics)

The term as opposed to unlimited liability refers to the principle whereby a shareholder of a company cannot be held personally liable for the company's debts beyond the fully paid up value of the shares he hold,

Compiler

LIMITED PARTNERSHIP (*Industrial economics)

A type of partnership business in which the principle of limited liability is extended to the holdings of dormant partners in the concern.

Compiler

LIMPING BIMETALLISM (*Monetary economics)

An imperfect form of bimetallism. Under this the two metals are unlimited legal tender but only one has got free coinage.

It existed in France and the U.S.A. before the World War I when gold and silver coins were both unlimited legal tender but only gold coins had free coinage.

Rajnarain Mathur

LIMPING STANDARD (*Monetary economics)

A monetary standard which has two legs—one of gold and one of silver but that of the silver is crippled and deformed.

This system was prevalent in France and other countries of the so-called Latin union.

Sir D.H. Robertson

It is a term which was applied to the gold standard during the period 1925-31 when it did not work as efficiently as before 1914 because many countries did not observe the "rules" of the gold standard. This term was also applied to a gold standard under which silver was not completely demonetized as in France and Germany in the 19th century.

M.L. Seth

LINE (*Mathematical economics)

A point stretched in length becomes a line. A line that keeps its direction unchanged is called a straight line. A curve is a line which does not project itself in the same direction.

Mahesh Chand

LINEAR DEMAND (*Theory of value)

The law of demand requires only that a demand curve slope downward to the right. When the discussion is abstract, describing "the" demand for "a" commodity, it is legitimate to take the simplest form of a demand curve. This is the straight line. Demand is then said to be linear. Empirical studies have sometimes found that demands for some actual commodities are linear. Hence the assumption that demand is linear is sometimes realistic.

D.S. Watson

LINEAR PROGRAMMING (*Mathematical economics)

Programming, both linear and non-linear, is entirely a mathematical

technique. Programming is concerned with the determination of the optimal solutions to problems. Its most fertile application is found in welfare economics and advice to businessmen.

W.J. Baumol

Linear programming was particularly developed as a technique of planning the diversified activities of an air-force.

We have mathematical programming, linear programming, integer programming, quadratic programming and non-linear programming.

Linear programming is a technique of study wherein we consider the maximisation (or minimisation) of a linear expression (called the objective function) subject to a number of linear equalities and inequalities (called linear constraints).

Mahesh Chand

Linear programming is a technique that uses sophisticated mathematics to solve certain kinds of problems especially production problems.

A foremost definition: Linear programming is the maximization (or minimization) of a linear function of variables subject to a constraint of linear inequalities.

Linear means that the relationships handled are the same as those represented by straight lines. Programming simply means systematic planning or decision making.

D.S. Watson

Linear programming is a practical tool of analysis and calculation which yields the optimum solution for a linear objective function subject to constraints in the form of inequalities.

There is a wide variety of problems to which linear programming methods have been applied. Examples: Diet, transportation, manufacturing, production, assembling, purchasing and job assigning.

G.S. Monga

The technique of linear programming which is also called "Mathematical programming" and "Active analysis" was developed in 1947 by the mathematician George B. Dantzig for the purpose of scheduling the complicated procurement activities of the U.S. Air Force. (Actually, the Russian Mathematician L.V. Kantorovich first formulated linear programming. But Dantzig invented a superior technique of computation.)

D.S. Watson

LIQUID ASSETS (*Monetary economics)

Short loans and discounts etc. which can be quickly turned into cash.

Frederich Benham

LIQUID CAPITAL (*Keynesian economics)

Goods in stock, which are yielding nothing but are capable of being used or consumed at any time.

J.M. Keynes

LIQUID FUNDS (*International economics)

Balance on current account, sight deposits, short-time deposits, long-time deposits with escape clauses, money at call or at short notice, bills which have a good market.

Paul Einzig

LIQUIDATION (*Industrial economics)

The dissolution or winding-up of a business, i.e., the conversion of assets into cash, the settlement of any indebtedness there may be and the distribution among the owners of any funds remaining.

P.A.S. Taylor

LIQUIDITY (*Monetary economics)

Power to convert into money.

A.K. Cairncross

Ease of exchangeability or the speed and certainty with which assets can be turned into money.

W.W. Haines

Hard cash.

Compiler

LIQUIDITY OF THE BANK (*Monetary economics)

A bank is liquid only to the extent that it turns its assets into cash to meet the demands of its depositors and other creditors as a rapidly as they are presented.

Many a bank that is solvent is not liquid. Its assets may exceed its liabilities to creditors but the assets may not be in such a form that they are readily convertible into cash.

Albert L. Meyers

The capacity of a bank to satisfy demand for cash in exchange for deposits.

A.K. Basu

Capacity of a bank to produce cash on demand for deposits.

R.S. Sayers

LIQUIDITY PREFERENCE (*Keynesian economics)

A potentiality or functional tendency which fixes the quantity of money which the public will hold when the rate of interest is given.

$$M=\alpha(r)$$

where

M=Quantity of money
α=Function of liquidity preference
R=rate of interest.

J.M. Keynes

The desire to hoard money.

Dudley Dillard

The extent to which people prefer to hold their assets in the completely liquid form of cash.

F. Benham

Demand for money.

Stonier and Hague

The amount of money that the public wants, at any particular time, to hold.

Geoffrey Crowther

The preference to have an equal amount of cash rather than of claims against others.

A.L. Meyers

The desire to hold a portion of one's assets in the form of money rather than in the form less liquid earning assets.

W.W. Haines

The origin of the concept of liquidity preference can be traced back to Richard Cantillon. Later it was developed by Kemmerer Albeit in a sketchy form. But this important concept as found in its present form is a contribution of Lord Keynes. According to Keynes there are three motives of liquidity preference or demand for money to hold:

(1) transaction, (2) precaution, and (3) speculation.

Compiler

LIQUIDITY PREFERENCE THEORY OF INTEREST (*Theory of *value*)

A revolutionary theory put forward by Lord Keynes. It was advanced as a challenge to classical theory of interest.

The theory states that the rate of interest is determined not by the

relation of the volume of savings to the volume of investment demand but by the supply of money and the demand for money as determined by liquidity preference.

In the words of Alvin H. Hansen—"America's Keynes"—"According to the Keynesian liquidity preference theory, the rate of interest is determined by the intersection of the supply schedule of money (perhaps interest—elastic, if fixed rigorously by the monetary authority) and the demand schedule for money (the liquidity preference schedule.)"

Compiler

LIQUIDITY RATIO (*Monetary economics)

Liquidity ratio or cash ratio refers to the ratio of bank reserves of cash to the volume of deposits. The ratio which differs from country to country is fixed by the monetary authorities.

Compiler

LIQUIDITY TRAP (*Keynesian economics)

The rate of interest might or might not fall with the increased supply of money depending upon the extent of preference of the people for liquid assets. If the preference for liquidity is quite high, the rate of interest cannot fall much. The rate of interest and the rate of liquidity preference have, in equilibrium, to balance each other. Hence, if liquidity prefernce is high, the rate of interest has also to be high. This is known in economic literature as the liquidity trap. The rate of interest is caught, as it were, in the liquidity trap.

J.K. Mehta

It refers to Keynesian contention that there is a minimum level below which the rate of interest cannot fall.

Don Patinkin

LIST, FRIEDRICH (1789-1846) (*History of economic thought)

A German Historical economist whom the world can never forget.

List who is considered by J.F. Bell as the father of American protectionism, committed suicide at Tyrol, disgusted with life. List was a son of tanner. List "a representative of nascent industrial capitalism and an apostle of economic nationalism" was a native of Wurttemberg (Germany). Becoming a clerk at 17, he rose to ministerial under-secretary. Later he was appointed as professor at Tubingen University. But since he was an advocate and journalist, List like Marx, was expelled from Germany for his excessive forthrightness. After travelling extensively in Europe in 1825, he fled to New York.

List had fervent nationalism for Germany and adamantine belief in State intervention. He wrote profusely. However, the book for which he is remembered is *Das Nationale System der Politischen Okonomie (1841)*.

It was translated into English in 1885. In this book he advanced the new theory of protectionism as opposed to free trade.

List accused Adam Smith and his followers of cosmopolitanism and individualism and substituted nationalism. Parodying Smith, he wrote "...that may be wisdom in national economy which would be folly, in private economy". He doubted that Smith's doctrines were untenable and concluded that protective tariffs were indispensable to industrially backward countries.

List's another great work is: *Outlines of American Political Economy* (1827).

With the exception of Karl Marx, no other economist has emphasised so strongly as List, the close interrelation of the theoretical economic view-point and political factors.

Compiler

LITTLE, I.M.D. (*History of economic thought)

A distinguished contemporary British economist and a founder of the new welfare economics. Professor Little who has held senior positions at Oxford University, the U.N.O. and the I.B.R.D., has published widely on economic matters, especially on the problems of the underdeveloped countries.

His well-known book is *A Critique of Welfare Economics.*

Compiler

LIVESTOCK (*Agricultural economics)

Animals kept for use and profit.

Das and Chatterji

LIVING TRUST (*Industrial economics)

Trust set up by an individual to operate during his life-time.

W.W. Haines

LIVING WAGE (*Economics of labour)

A wage sufficient to ensure to the workman food, shelter, clothing, frugal comfort and provision for the evil days.

Justice Higgins

Treating marriage as the usual fate of adult men, a wage which does not allow of the matrimonial condition and the maintenance of about five persons in a home would not be treated as a living wage.

Justice Higgins

A sum sufficient for the normal and reasonable needs of the average employee living in a locality where the work under consideration is done or is to be done.

South Australian Industrial Code of 1920

The concept of living wage was first defined in 1907 by a court where justice Higgins was the president of Commonwealth Court of Concilliation and Arbitration (Australia).

V.V. Giri

LOAN CAPITAL (*Monetary economics)

The net balance of claims on money.

J.M. Keynes

Capital invested in short or long term loans that are repayable.

Briggs and Jordan

LOANABLE FUNDS (*Theory of value)

The supply of loanable funds is compounded of saving (in the Robertsonian sense) plus net additions to loanable funds from new money and the dishoarding of idle balances.

In Robertsonian language, in fact, "loanable funds" consist of voluntary saving (i.e. saving out of "disposable" income) plus borrowed bank funds and activated idle balances. (Disposable income means yesterday's income).

Alvin H. Hansen

The amount of funds that would be supplied by lenders or demanded by borrowers in a given period at various rates of interest.

W.W. Haines

As conceived by the exponents of loanable funds theory of interest, the loanable funds are made up of savings out of current income, bank credit, dishoardings and investment.

Compiler

LOANABLE FUNDS THEORY OF INTEREST (*Theory of value)

According to this (neo-classical theory which Sir D.H. Robertson calls "a commonsense account of events), the rate of interest is determined by the intersection of the demand schedule for loanable funds with the supply schedule.

According to Mark Blaug, the theory with all its implication that the rate of interest is influenced by the state of the money market, is contained in Thornton and in David Ricardo and is ably expounded by J.S. Mill and it is found not only in Wicksell and Fisher but also in Pigou.

However, it is also argued that the theory was first formulated by Knut Wicksell of Sweden and later it was developed by his countrymen—Bertil Ohlin, E.R. Lindahl and Gunner Myrdal. Nevertheless since the main burden of developing this theory was shouldered by D.H. Robertson, it is called sometimes Robertsonian theory of interest.

Compiler

LOANS AND DISCOUNTS (*Monetary economics)

They represent an asset of the bank because they are rights or claims of the bank against its borrowers to be collected at some specific date in the future, the date depending upon the length of the loan.

Dudley Dillard

The process by which a bank lends to its customers; also the asset that a bank acquires in exchange for the funds advanced. If interest is paid when the debt is repaid it is a loan; if the charge is deducted in advance, it is a discount.

W.W. Haines

LOANS AND INVESTMENTS (*Monetary economics)

The earning assets of a bank. Loans (and discounts) are usually personally negotiated with each borrower. Investments are generally securities purchased on the open market.

W.W. Haines

LOCALISATION OF INDUSTRY (*Industrial economics)

An industry concentrated in certain localities is commonly though perhaps not accurately described as a localised industry.

Alfred Marshall

It is also called regional or territorial division of labour.

Compiler

By localisation or location of industry is meant concentration of different industries in different localities.

All modern thinking about the theory of industrial location started after 1929 with the publication of Alfred Weber's (German) work, *Theory of the Location of Industries.*

Srivastav, Nigam, Sahai and Banerjee

LOCK-OUT (*Economics of labour)

"The closing of a place of employment or the suspension of work or the refusal by an employer to continue to employ any number of persons employed by him."

Quoted

An industrial dispute in which the employer closes down the firm in an attempt to bring the workers to terms.

P.A.S. Taylor

LOCKE, JOHN (1632-1704) (*History of economic thought)

John Locke of England considered to be "The father of the philosophy of the Physiocrats" was the immediate follower of Sir William Petty.

He was largely influenced by the Mercantilist notions. His name is much greater in philosophy than in economics.

Locke, an individualist, insisted that a country grew rich by exporting more than it imported. He regarded rent as the only suplus. Holding that money, unlike soil, barren, he showed that prices varied in a definite proportion to the quantity of money. Thus, Locke is one of the originators of the quantity theory of money.

In his famous book *Some Considerations of the Consequences of the Lowering of Interest and Raising the Value of Money* (1691), he gave a very good analysis of the effect of debasement on prices. In his *An Essay Concerning Human Understanding* (1690), he dealt with hedonism. His other work is *Two Treatises Concerning Government* (1690).

Compiler

LOKANATHAN, PALAMADAI SAMU (1894-1972) (*History of economic thought)

An eminent Indian Economist.

Born on October 10, 1894 at Palamadai (Tirunelveli district), Lokanathan was educated at St. Joseph's college, University of Madras and London School of Economics. He served as Professor of economics, Madras University (1941-42), editor, *Eastern Economist*; (1943-47), Executive Secretary of the U.N. Economic Commission for Asia and the Far East (ECAFE), Bangkok; Director-General, National Council of Applied Economic Research (NCAER); (NCAER was started at the initiative of Dr. P.S. Lokanathan, and the techno-economic surveys conducted by the council were his innovation); Chairman, National Productivity Council (1958-66); Director for India, of Asian Productivity Organisation, Tokyo, 1963; Consultant to Institute of National Planning, Cairo, 1960; Member, Governing Council of Asian Institute of Economic Development and Planning, Bangkok; Member, National Savings Central Advisory Board, Ministry of finance; Member, Export-Import Advisory Council of Industries; Member, Panel of Economists, Planning Commission; visiting Professor of business management, university of Delhi; and Honorary Fellow, London School of Economics and Political Science.

Prof. Lokanathan was awarded "Most Noble Order of the Crown of Thailand. He was the 30th President of the Indian Economic Association in 1947.

He wrote:

(i) *Industrial Welfare in India.*
(ii) *Industrial Organisation in India.*
(iii) *India's Industry.*
(iv) *India's Economic System.*

Professor Lokanathan died of kidney trouble at the Voluntary Health Services Hospital at Adyar on May 5, 1972.

Compiler

LOMBARD STREET (*Monetary economics)

The famous book of Walter Bagehot published in 1873. The principles of the system of credit control were not discovered and enunciated until the appearance of *Lombard Street.*

Geoffrey Crowther

The classical pamphlet by Walter Bagehot. It contains the doctrine that in times of stress, the central bank must lend and lend without stint. This is how the idea that "Central Bank is the lender of the last resort" developed.

R.S. Sayers

Lombard street of London used to be the most important market in the world for loanable capital. In it are included foreign banking and financial houses; the English bill-brokers, discount and accepting houses.

Briggs and Jordan

LONDON BALANCES (*Monetary economics)

Balances kept in London.

R.S. Sayers

LONDON BANKER'S CLEARING HOUSE (*Monetary economics)

It is in Lombard Street (London). It represents eleven clearing banks, viz., Barclays, Lloyds, Midland, National Provincial, Westminster, District, Glynmills, Martins National Williams, Deacons and the Bank of England which is the ex-officio member.

R.S. Sayers

LONG EXCHANGE (*International economics)

The exchange rates applicable to bills of exchange maturing sometime after the date of purchase. It is a pre-war exchange.

Norman Crump

LONG PERIOD (*Theory of value)

A period which takes into account the manufactures of new plant and equipment either to replace the existing plant and equipment or to add to present plan capacity.

A.L. Meyers

In this period as defined by Marshall, there is time for firm's fixed equipment to be altered so that output is capable of adapting itself more

fully to changes in demand conditions than it is in the short period. There is time to build new machines, factories and old ones can be closed down or allowed to fall to pieces.

A.W. Stonier and D.C. Hague

A period long enough to permit full adjustment to be made, long enough to allow all the additional fixed capital that may be needed to be produced and installed long enough to permit all the additional skilled workers who may be needed to be trained and attracted to the industry.

F. Benham

In the long run, all inputs are variable in amount; a firm's output can range from zero to an infinitely large quantity.

D.S. Watson

A period of time long enough to permit changes in the fixed and variable factors.

Allen, Buchanan and Colberg

A time period long enough so that all costs become variable with changes in output.

George L. Bach

A period of time sufficiently long to permit, when the industry is profitable, existing firms to expand their plants or new firms to enter the industry with newly constructed plants, or to permit, when the industry is incurring losses, firms already in operation to close down their plants and withdraw from the industry.

Fairchild, Buck and Slesinger

With reference to banking, a period over five years.

L.V. Chandler

A period sufficiently long for complete adjustment to an economic change to take place including changes in the capital investment in the firm or industry.

R.A. Lester

LONG PERIOD DUMPING (*International economics)

Also known as continuous dumping it is the sale abroad but unlike short period or intermittant dumping not at a loss, that is, at a price below the marginal cost.

G. Von Haberler

LONG PERIOD PROFITS (*Theory of value)

Profits earned by firms which are in long period equilibrium.

Miles Fleming

LONG RUN (*Theory of value)

Another name for long period.

Compiler

LONG TERM CAPITAL EXPORTS (*International economics)

They consist in the purchase of shares in the foreign undertakings, the purchase of home securities or repayment of loans contracted abroad, the purchase of foreign holdings in property located at home etc. .

Gottfried Haberler

LONG TERM EXPECTATION (*Keynesian economics)

Expectation that is prospective yield which an entrepreneur expects to obtain from selling the output of his capital assets is of two types—short term and long term.

The long term expectation concerns the sales proceeds which an entrepreneur can hope to earn with variations in the size of his plant or from the building of entirely new plant.

Dudley Dillard

LONG WAVES (*Business cycles)

Trend cycles. They extend over a period of 50 to 60 years.

G. Haberler

LORENZ CURVE (*Theory of value)

Devised by Dr. Lorenz, it is the graphic device of measuring the inequalities in the distribution of income.

A Lorenz curve is plotted by taking the cumulative percentages of total income received on Y-axis and the cumulative percentages of income recipients on X-axis. The curve with the slope of 45° would indicate equal distribution of income and the degree to which Lorenz curve deviates from the line of equal distribution measures the degree of inequality.

The device is applied to measure disparities in personal incomes and in national incomes of different countries.

Compiler

LORO ACCOUNTS (*International economics)

Current accounts of banks with foreign banks in terms of a foreign currency held on behalf of their clients.

Paul Einzig

LOWER TURNING POINT (*Business cycles)

A phase or a turning point of business cycle. The turn from depression to prosperity, up turn, revival.

Compiler

LUMP OF LABOUR FALLACY (*Economics of labour)

The attitude of workers that their job and livelihood are at constant threat by events like replacement of labour by machine, women's entry into labour market, unwillingness of old workers to retire etc. is sometimes called by economists lump of labour fallacy.

P.A. Samuelson

LUXURY (*Theory of value)

Luxury in its ordinary sense means anything that satisfies a superfluous want.

Ely

A commodity for which demand is elastic.

Briggs and Tordan